TEAC®

SERVICE MANUAL

V-500X/V-400X

Stereo Cassette Deck

MP MASTER
MA32778

Effective: October, 1983

5704018400

1 SPECIFICATIONS AND SERVICE DATA
仕様およびサービス・データ

Notes:
1. Improvements may result in changes in specifications and service data.
2. 0 dB is referenced to 0.775 V in this manual.

注：
1. 仕様およびサービス・データは改善のため予告なく変更することがあります.
2. 本マニュアルでは0dBは0.775Vを基準としています.

SPECIFICATIONS

Track System 4-track, 2-channel stereo
2 Heads Erase, record/playback
Type of Tape Cassette tape, C-60 and C-90 (philips type)
Tape Speed 4.8 cm/s (1-7/8 ips)
Input (level and impedance)
- MIC: Specified input level: −57 dB (1.09 mV)/10 kohms
  Min. input level: −67 dB(346 μV)
- LINE IN: Specified input level: −9 dB (275 mV)/50 kohms
  Min. input level: −19 dB (86.9 mV)

Output (level and load impedance)
- OUTPUT: Spec. output level: −3 dB (548 mV)/50 kohms
- PHONES: Spec. output level: −19 dB (86.9 mV)/8 ohms

Equalization
- METAL: 3180 μs + 70 μs
- CrO_2: 3180 μs + 70 μs
- NORMAL: 3180 μs + 120 μs

Head Configuration
- 1/2-track, 1-channel erase head
- 1/4-track, 2-channel record/playback head

Motor 1 DC servo motor
Bias Frequency 85 kHz ±5 kHz
Operation position Horizontal
Power Requirements
- 100/120/220/240 V AC, 50/60 Hz (General Export Model)
- 120 V AC, 60 Hz (U.S.A./Canada)
- 220 V AC, 50 Hz (Europe)
- 240 V AC, 50 Hz (U.K./Australia)
- 100 V AC, 50/60 Hz (JAPAN)

Power Consumption
- 20W (V-500X), 19W (V-400X)

Weight 5.4 kg (11-7/8 lbs.) net

SERVICE DATA

MECHANICAL
Tape Speed Deviation 3,000 Hz ±75 Hz
Tape Speed Drift 45 Hz
Wow and Flutter
- Playback: 0.12% (WRMS)
- Record/Playback: 0.30% (RMS)

Pinch Roller Pressure 250 g to 350 g (8.8 oz to 12.4 oz)
Reel Torque
- Take-up: 40 to 65 g-cm (0.555 to 0.903 oz-inch)
- Supply: 2 to 6 g-cm (0.0278 to 0.0833 oz-inch)
- F.F.: 70 to 140 g-cm (0.97 to 1.94 oz-inch)
- REW: 70 to 140 g-cm (0.97 to 1.94 oz-inch)

Fast Wind Time
- 95 sec. or less for MTT-501 (C-60)

Auto End-stop Time 5 sec. or less

ELECTRICAL
Frequency Response
- See Figs. 5-5 to 5-7.

Signal-to-noise Ratio
- Playback NORMAL: 48 dB min.
- Record/Playback
  METAL, CrO_2: 47 dB min.
  NORMAL: 46 dB min.
- S/N is improved by 5 dB at 1 kHz and 10 dB above 5 kHz when Dolby NR* (B-type) is used.

Erase Efficiency 65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input level).
Channel Separation 35 dB min. at 1 kHz
Adjacent Track Crosstalk 60 dB min. at 125 Hz
Total Harmonic Distortion 2.0% or less with METAL, CrO_2
2.5% or less with NORMAL

- Dolby Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.
  "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- dbx Noise Reduction system made under license from dbx Incorporated. The name "dbx" and the dbx symbol are trademarks of dbx Incorporated.

CAUTION

⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components – refer to the appropriate parts list and ensure exact replacement.

＊ドルビー・ノイズ・リダクション・システムは,ドルビー・ラボラトリーズ・ライセシング・コーポレーションからの実施権に基づいて製造されています.
＊ドルビーおよび DD は，ドルビー・ラボラトリーズ・ライセシング・コーポレーションの登録商標です.
＊dbxおよびdbxマークは，dbxインコーポレーテッドの登録商標です.
＊dbxシステムは，dbxインコーポレーテッドの実施権に基づいて製造されています.

注 意

⚠印は安全重要部品です．交換する場合は必ずティアックの指定部品を使用してください.

2 CASE AND FRONT PANEL REMOVAL

外装部品のはずし方

Disassemble in number-order
番号順にはずしてください.

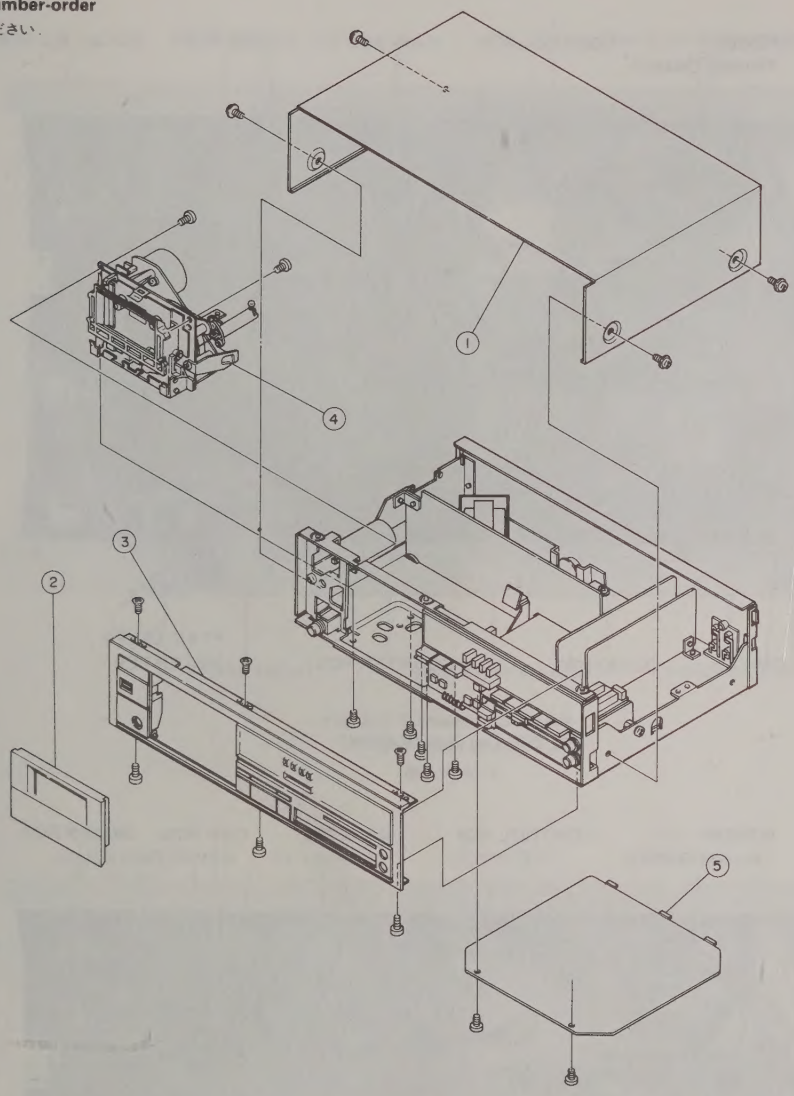


Fig. 2-1

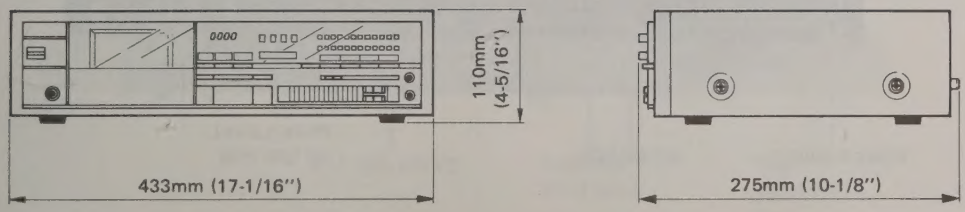


Fig. 2-2

3 PARTS LOCATION
部品配置図

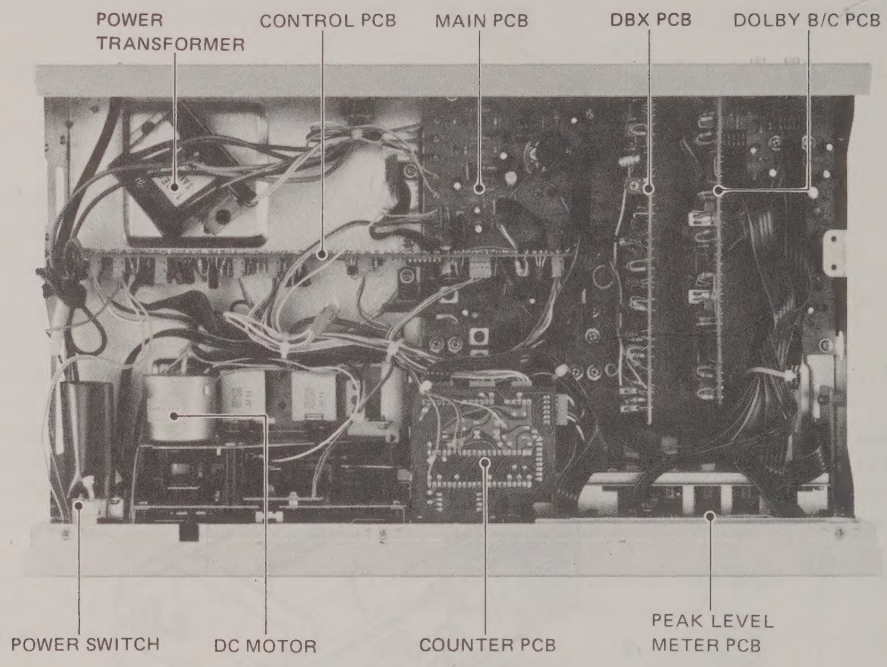


Fig. 3-1 Top view (V-500X)
V-500X上面

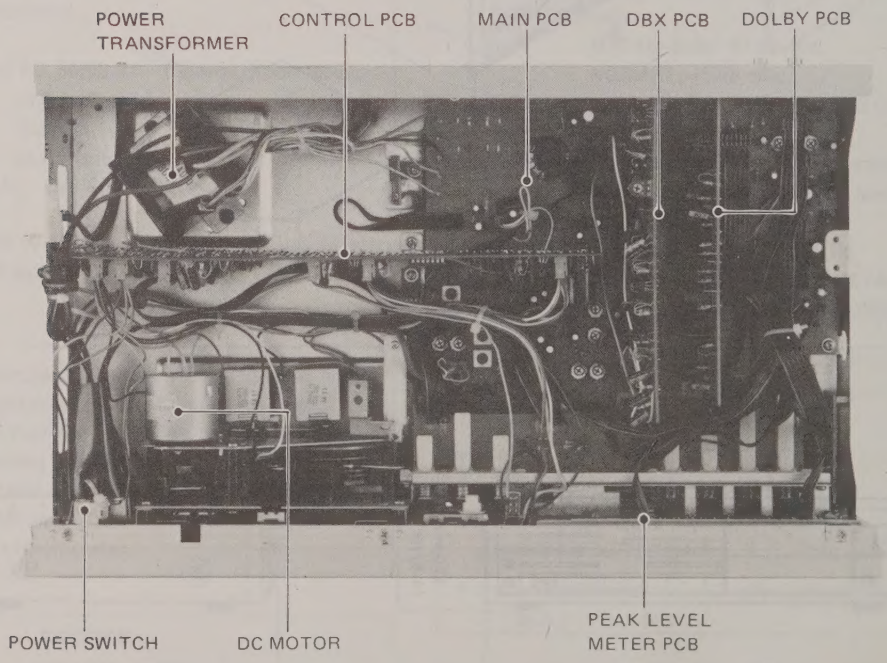


Fig. 3-2 Top view (V-400X)
V-400X上面

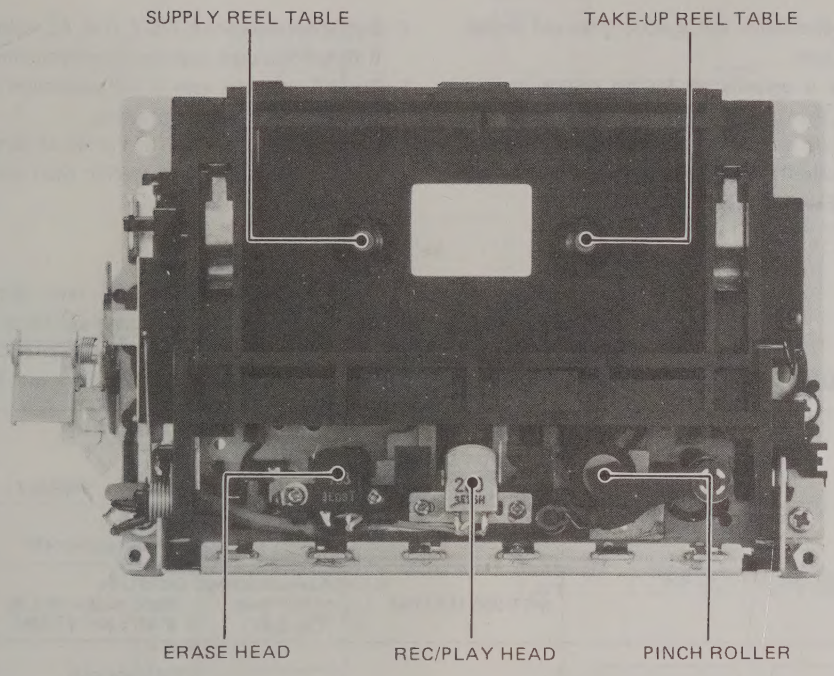


Fig. 3-3 Transport front view
トランスポート部前面

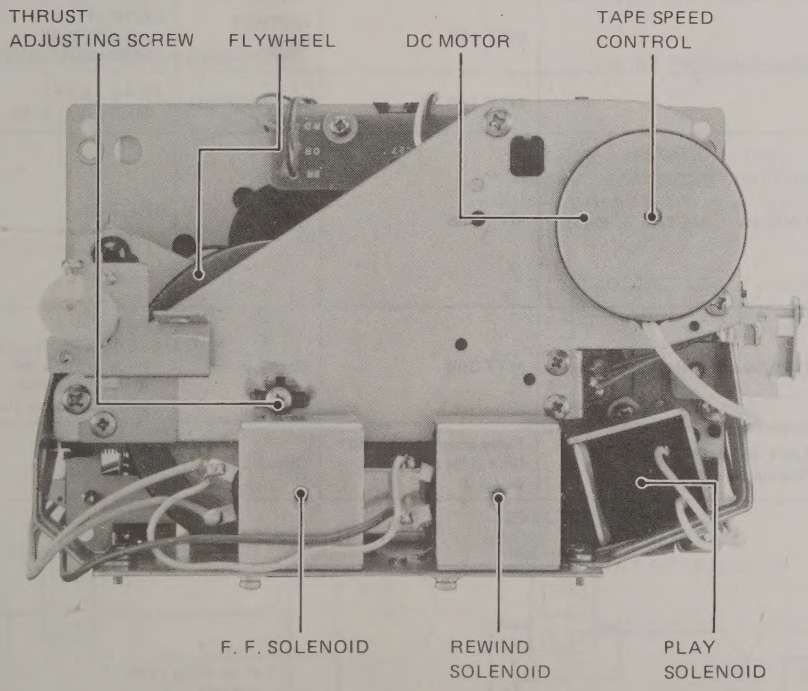


Fig. 3-4 Transport rear view
トランスポート部後面

4 MECHANICAL ADJUSTMENTS AND CHECKS
機構部の調整および確認

4-1 CAPSTAN ASSEMBLY THRUST

1. Turn the thrust adjusting screw so that thrust of the capstan shaft is from 0.1 mm to 0.3 mm. For the thrust adjusting screw location, see Fig. 3-4.

4-2 TAPE SPEED

1. Connect a frequency counter to the deck as shown in Fig. 4-1.
2. Simply press POWER switch to ON to rotate the motor, then continue the motor rotation for approx. 1 minute for warm-up.
3. As soon as the warm-up finishes, load a TEAC MTT-111 test tape with a 3,000 Hz test tone and play the middle of the test tape.
4. While the tape is playing, use a common slotted screwdriver with the handle completely insulated from the blade, and adjust the control built into the motor (see Fig. 3-4.) for a reading of 2,985 to 3,015 Hz on the frequency counter.
5. Play the tape at the beginning and at the end, and check that the speed deviation is within the prescribed limits by observing that the reading on the frequency counter never deviates more than ±75 Hz from 3,000 Hz, nor drifts more than 45 Hz at any given time.

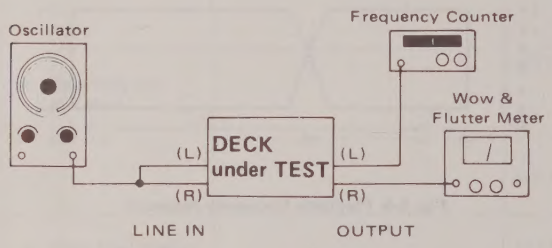


Fig. 4-1

4-3 WOW AND FLUTTER

Note: These measurements should be made at the begining, middle, and the end of the tape.

1) PLAYBACK

1. Connect a wow-and-flutter meter to the deck as shown in Fig. 4-1.
2. Load and play a TEAC MTT-111 test tape.
3. Check that the reading on the wow-and-flutter meter is within 0.12% (WRMS).

2) RECORD/PLAYBACK

4. Load a TEAC MTT-501 test tape (blank) and record a 3,000 Hz signal.
5. Rewind the tape to the beginning of the recorded section, and play it.
6. The wow-and-flutter should not be more than 0.30% (RMS).

1.キャプスタンのスラスト調整

スラスト調整ねじ(Fig3-4参照) でスラストのガタを0.1～0.3 mmの範囲内に調整.

2.テープ速さ調整

MTT-111テープを再生し，再生周波数が3,000±15Hzの範囲内であることを確認する.

3.ワウ・フラッタ・チェック

再生法	WRMS	0.12%	MTT-111使用
録再法	RMS	0.30%	MTT-501使用

4-4 VOLTAGE CONVERSION
(General Export Models only)

1. ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS!
2. Locate the voltage selector on the rear panel as shown in the illustration.
3. Using a regular screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

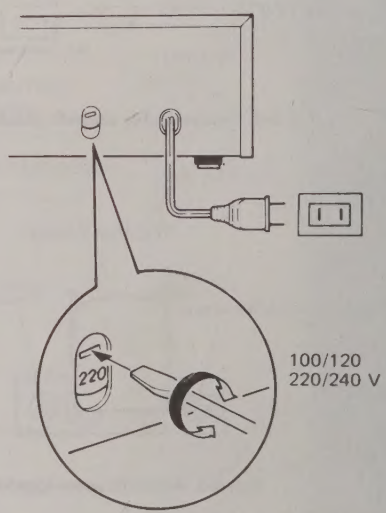
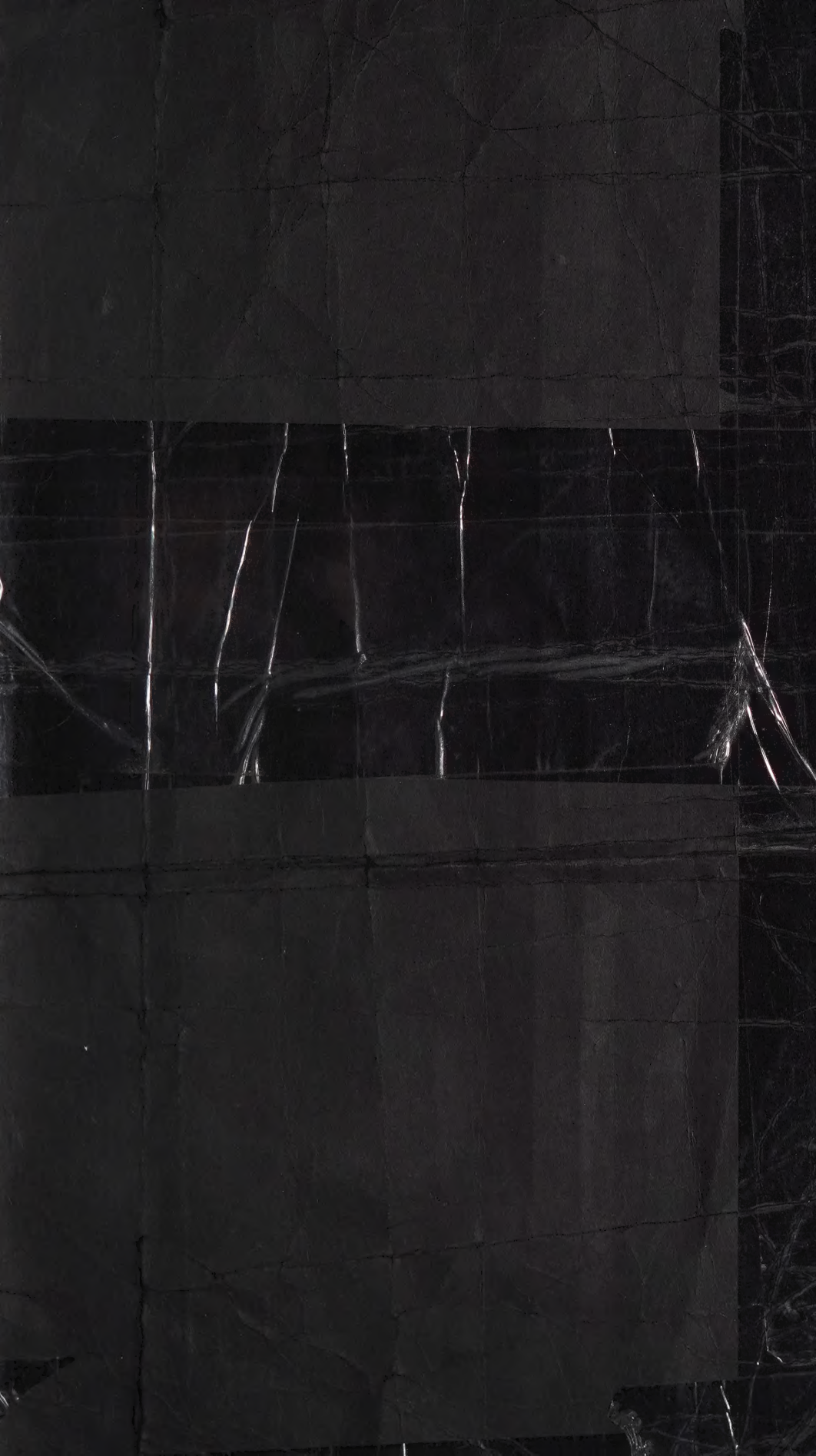


Fig. 4-2



5 ELECTRICAL ADJUSTMENTS AND CHECKS
アンプ部の調整と確認

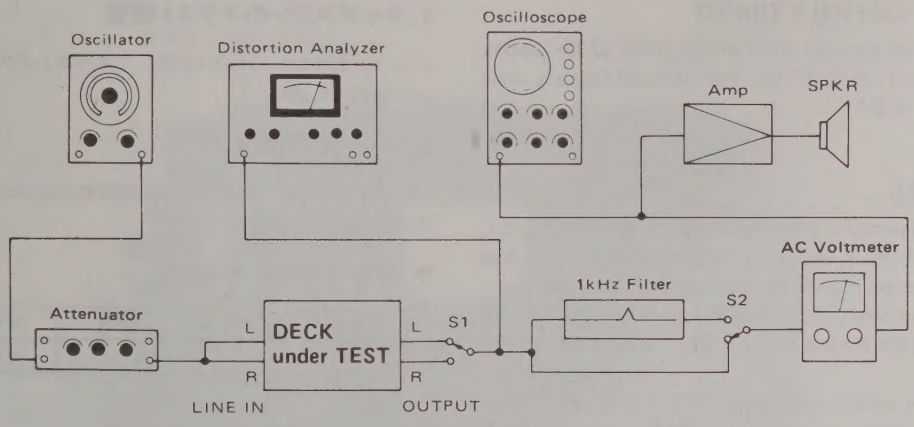


Fig. 5-1 Basic test setup

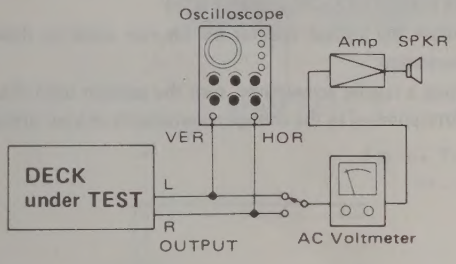


Fig. 5-2 Test setup for azimuth check

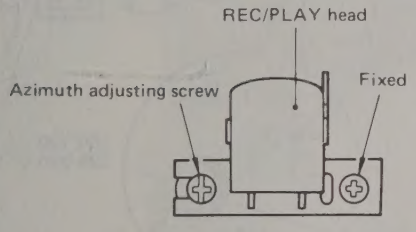


Fig. 5-3 Azimuth screw location

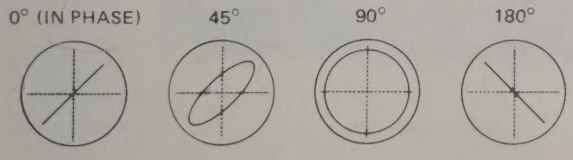


Fig. 5-4 Confirming phase relationship

SELECTOR | METAL | CrO_2
TAPE | MTT-356 | MTT-356

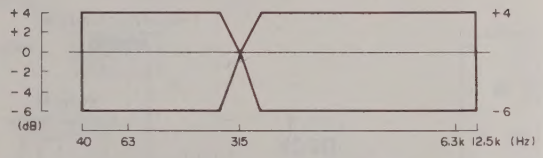


Fig. 5-5 Playback frequency response

SELECTOR | METAL | CrO_2
TAPE | MTT-5072 | MTT-5061
----- DOLBY NR (B-type): IN

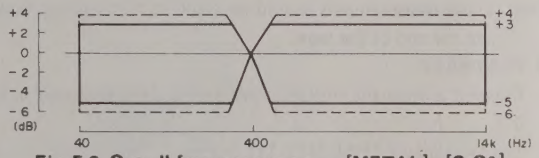


Fig. 5-6 Overall frequency response [METAL], [CrO_2]

SELECTOR | NORMAL
TAPE | MTT-501
----- DOLBY NR (B-type): IN

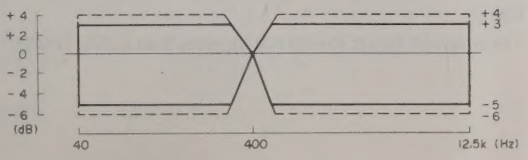


Fig. 5-7 Overall frequency response [NORMAL]

PRECAUTIONS

1. Before performing adjustments and checks, clean and demagnetize the entire tape path.
2. Make sure the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks are made in the order of L-ch then R-ch. Double REF. Nos. and test point designations indicate L-ch/R-ch. (Example: R11/R21)
4. 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 M-ohms or more.
6. Note the "Deck settings" at the top of each chart. The settings apply to all checks for a specific chart unless explicitly stated otherwise.

5-1 PLAYBACK PERFORMANCE

Deck settings:
TAPE SELECTOR sw: METAL
NR SYSTEM sw: OUT
OUTPUT cont.: 10 (MAX)

TEAC test tapes:
MTT-150: For Dolby level calibration
MTT-356: For playback frequency response check for METAL, CrO_2
MTT-501: For S/N check with NORMAL

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT / RESULT	REMARKS
1. REC/PLAY head azimuth	Connection: Fig. 5-2	MTT-150	Check	OUTPUT: Phase: within 45°	Refer to Fig. 5-4.
		MTT-356 (10 kHz)	Azimuth screw of R/P head (Fig. 5-3)	OUTPUT: Max. output at L-& R-ch's (on VTVM)	
2. Specified output level	–	MTT-150	SR101/SR201	T.P (DOLBY) V-500X: 245 mV (−10 dB) V-400X: 580 mV (−2.5 dB)	
	–	MTT-150	OUTPUT cont.	OUTPUT: −3 dB ±1 dB (489 to 615 mV)	Spec. output level
3. Peak level display	–	MTT-150	SR104/SR204	PEAK LEVEL DISPLAY: 0 dB	
4. Frequency response	TAPE sw: METAL or CrO_2	MTT-356	Check	OUTPUT: Fig. 5-5	
	TAPE sw: NORMAL	MTT-356	Check	OUTPUT: At 10 kHz, should be approx. 4 dB higher than measured in above step.	
5. Signal-to-noise ratio	TAPE sw: NORMAL Play-pause mode	Fully-erased MTT-501 tape (Use bulk tape eraser.)	Check	OUTPUT: 48 dB min.	Ratio of spec. output of −3dB to noise.

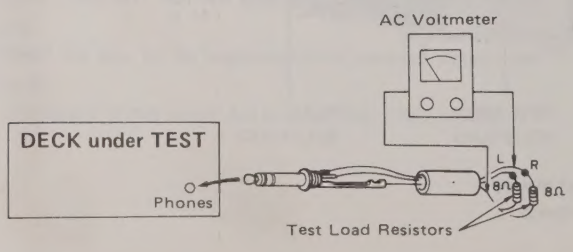


Fig. 5-8 Test setup for headphone check

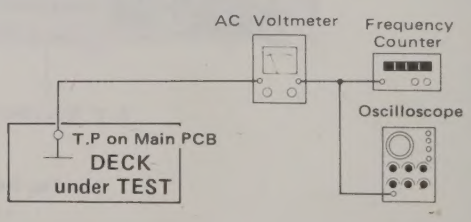


Fig. 5-9 Test setup for bias trap adjustment

5-2 MONITOR PERFORMANCE

Deck settings:
RECORD-PAUSE mode
NR SYSTEM sw: OUT
OUTPUT cont.: Specified position (item 2)

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT / RESULT	REAMRKS
6. Min. input level	RECORD cont. (L/R): MAX	MIC: 400 Hz/–67 dB (346 μV) LINE IN: 400 Hz/–19 dB (86.9 mV)	Check	OUTPUT: –3 dB ±3 dB (388 mV to 775 mV)	MIC min. input level LINE min. input level
7. Specified LINE input level	–	LINE IN: 400 Hz/–9 dB (275 mV)	RECORD cont. (L/R)	T.P (DOLBY) V-500X: 245 mV (–10 dB) V-400X: 580 mV (–2.5 dB)	Specified setting of RECORD cont. Specified LINE input level.
	–	LINE IN: 400 Hz/–9 dB (275 mV)	Check	OUTPUT: –3 dB ±1.5 dB (461 mV to 652 mV)	
	IMPORTANT: Do not change the setting of the RECORD controls after establishing their setting as above.				
8. Peak level display	–	LINE IN: 400 Hz/–9 dB (275 mV)	Check	PEAK LEVEL DISPLAY: 0 dB	
9. Headphone output level	Connection: Fig. 5-8	LINE IN: 400 Hz/–9 dB (275 mV)	Check	PHONES: –19 dB ±3 dB (61.5 mV to 109 mV)	8 ohm load

5-3 RECORDING PERFORMANCE

Deck settings:
NR SYSTEM sw: OUT
RECORD cont. (L/R): Specified position (item 7)
OUTPUT cont.: Specified position (item 2)

TEAC recording test tapes:
MTT-5072: For METAL
MTT-5061: For CrO_2
MTT-501: For NORMAL

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT / RESULT	REMARKS
10. Bias trap	Connection: Fig. 5-9 Record-pause mode	LINE IN: No signal	L901	T.P. (HEAD) 85 kHz on frequency counter	Specified bias frequency
			T101/T201	TP102 TP202	
11. Record bias	TAPE sw: NORMAL Tape: MTT-501	LINE IN: 400 Hz & 12.5 kHz alternately/–42 dB (6.15 mV)	SR102/SR202	OUTPUT: Nearly equal level at both frequencies.	DOLBY B NR: IN
	TAPE sw: CrO_2 Tape: MTT-5061		Check		
	TAPE sw: METAL Tape: MTT-5072				
12. Record level	TAPE sw: CrO_2 Tape: MTT-5061	LINE IN: 400 Hz/–12 dB (195 mV)	SR103/SR203	OUTPUT: –6 dB (388 mV)	
	TAPE sw: NORMAL Tape: MTT-501		Check	OUTPUT: –6 dB ±1.5 dB (327 mV to 461 mV)	
	TAPE sw: METAL Tape: MTT-5072				

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT / RESULT	REMARKS
13. Total harmonic distortion	TAPE sw: METAL Tape: MTT-5072 TAPE sw: CrO_2 Tape: MTT-5061 TAPE sw: NORMAL Tape: MTT-501	LINE IN: 400 Hz/−12 dB (195 mV)	Check	OUTPUT: 2.0% or less with METAL, CrO_2 2.5% or less with NORMAL	
14. Frequency response	TAPE sw: METAL Tape: MTT-5072 TAPE sw: CrO_2 Tape: MTT-5061 TAPE sw: NORMAL Tape: MTT-501	LINE IN: Required signal/ −42 dB (6.15 mV)	Check	OUTPUT: Fig. 5-6 and 5-7	If out of spec., recheck #11 and #13
15. Signal-to-noise ratio	TAPE sw: METAL Tape: MTT-5072 TAPE sw: CrO_2 Tape: MTT-5061 TAPE sw: NORMAL Tape: MTT-501	LINE IN: 1 kHz/−9 dB (275 mV) ↓ no signal	Check	OUTPUT: 47 dB min. [METAL, CrO_2] 46 dB min. [NORMAL]	Ratio of specified output of −3 dB to noise
16. Erase efficiency	Connection is same as in Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Rewind tape to midpoint of recorded portion. Record a "no signal" portion. Find the difference between the 1-kHz portion and the "no-signal" portion.				
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 1 kHz/+1 dB (0.869 V) ↓ no signal	Check	OUTPUT: 65 dB min. ratio	Ref. output level: +7 dB (1.73 V)
17. REC MUTE function	Connection: Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Push REC MUTE button for several seconds. (At this time, make sure lights). Rewind and play the tape. Find the difference between the 1-kHz portion and the "no-signal" portion.				
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 1 kHz/+1 dB (0.869 V) ↓ no signal	Check	OUTPUT: 65 dB min. ratio	Ref. output level: +7 dB (1.73 V)
18. DOLBY NR effect (B-type)	Record a 1-kHz signal with switch in □□B (V-500X) or □□ (V-400X). Play this portion with switch set to OUT and □□B or □□. Obtain the difference in output level between OUT and □□B/□□ positions. Repeat the above process usnig a 10-kHz signal.				
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 1 kHz/−29 dB (27.5 mV)	Check	OUTPUT: Variation 3 dB ~ 8 dB	
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 10 kHz/−39 dB (8.69 mV)	Check	OUTPUT: Variation 8 dB ~ 12 dB	
19. Dolby NR effect (C-type) V-500X	Repeat the same procedure above, except see that the NR SYSTEM switch is set to □□C.				
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 1 kHz/−39 dB (8.69 mV)	Check	OUTPUT: Variation 16 dB ~ 20 dB	
	TAPE sw: METAL Tape: MTT-5072	LINE IN: 10 kHz/−49 dB (2.75 mV)	Check	OUTPUT: Variation 16 dB ~ 20 dB	
20. dbx adj.	TAPE sw: NORMAL NR SYSTEM: dbx	LINE IN: 1 kHz/−24 dB	SR971	15 mV	Voltage between both lead of R984 (1 kΩ)

注1．調整および確認の前に，消去および録／再の各ヘッドとテープ走行部をそれぞれ充分に消磁し，クリーナ液で清掃する．
2．調整および確認は左チャネル，右チャネルの順に行なう．
3．0dB＝0.775V
4．使用するレベル計の入力インピーダンスは1MΩ以上．
5．特に指示のない限り各スイッチおよびつまみの位置は各表のように設定する．

再生系

NR SYSTEM：OUT
TAPE SELECTOR：METAL
OUTPUTつまみ：10(最大)

調整項目	準備・設定	入力信号	調整個所	測定個所・調整値	備考
1．ヘッド・アジマス調整	設定表参照 (Fig5-2)	MTT-150	チェック	位相 45°以内	Fig5-4参照
		MTT-356 (10kHz区分)	ヘッドのアジマス調整ねじ	L,R共最大出力	
2．再生レベル・セット	同上	MTT-150	SR101/SR201	T.P.(DOLBY) V-500X：245mV (−10dB) V-400X：580mV (−2.5dB)	
			OUTPUTつまみ	OUTPUT：−3±1dB	規定再生状態
3．メーター・レベル・セット	規定再生状態	MTT-150	SR104/SR204	ピーク・レベル・プログラム・メーター指示：0dB	
4．再生周波数特性チェック	TAPE SELECTOR METAL/CrO_2	MTT-356	チェック	OUTPUT：Fig5-5参照	
	TAPE SELECTOR NORMAL	同上	チェック	OUTPUT：TAPE SELECTORをMETAL→NORMALにすると，10kHzの出力が4dB高くなること．	
5．再生S／Nチェック	同上	空カセット (テープなし)	チェック	S/N NORMAL：48dB以上	基準レベルは−3dB

モニタ系

録音待機状態
NR SYSTEM：OUT
OUTPUTつまみ：規定出力状態

調整項目	準備・設定	入力信号	調整個所	測定個所・調整値	備考
6．最小入力レベル	RECORD つまみ MAX	400Hz/−67dB	チェック	OUTPUT：3±3dB	MIC最小入力レベル
	同上	400Hz/−19dB	チェック	同上	LINE 最小入力レベル
7．LINE入力レベル	——	LINE IN：400Hz/−9dB	RECORDつまみ	T.P.(DOLBY) V-500X：245mV (−10dB) V-400X：580mV (−2.5dB)	RECORD つまみの規定入力レベルセット位置
		同上	チェック	OUTPUT：−3±1.5dB	規定入力状態
8．メーター・レベル・チェック	LINE規定入力状態	同上	チェック	ピーク・プログラム・レベル・メーター指示 0dB	
9．ヘッドホン出力レベル・チェック	同上 接続はFig5-8参照	同上	チェック	PHONES：−19±3dB	8Ω負荷

NR SYSTEM：OUT
OUTPUTつまみ：規定出力状態
RECORDつまみ：規定入力状態

録音系

調整項目	準備・設定	入力信号	調整個所	測定個所・調整値	備考
10.バイアス・トラップ	設定 Fig5 9参照 REC/PAUSE 状態	無信号	L901	TP(TP101/TP201) 85kHz	規定バイアス発振周波数
	同上	同上	T101/T201	TP102/TP202	バイアス漏れ最小
11.バイアス・セット	TAPE SELECTOR / テープ NORMAL / MTT-501 CrO_2 / MTT-5061 METAL / MTT-5071	LINE IN： 400Hz, 12.5kHz /−42dB	SR102/SR202	OUTPUT 両信号の出力レベルが等しくなるよう調整	DOLBY B NR：IN
		同上	チェック		
12.録音レベル・セット	CrO_2 / MTT-5061 NORMAL / MTT-501 METAL / MTT-5072	LINE IN： 400Hz/−12dB	SR103/SR203	OUTPUT：−6dB	規定録音状態
			チェック	OUTPUT：−6±1.5dB	
13.総合歪率チェック	METAL / MTT-5072 CrO_2 / MTT-5061 NORMAL / MTT-501	LINE IN： 400Hz/−12dB	チェック	OUTPUT： METAL,CrO_2 2.0%以下 NORMAL 2.5%以下	
14.総合周波数特性	同上	-42dB	チェック	規格 OUTPUT： METAL,CrO_2 Fig5-6参照 NORMAL Fig5-7参照	規定を満足しない場合は11項および13項をチェック
15.総合S/Nチェック	同上	LINE IN： 1kHz/−9dB →無信号	チェック	OUTPUT： METAL,CrO_2 47dB以上 NORMAL 46dB以上	基準レベルを−3dBとした場合の雑音レベル比
16.消去率チェック	METAL / MTT-5072	LINE IN： 1kHz/+1dB →無信号	チェック	OUTPUT： レベル差65dB以上	1kHz B.P.F使用.+7dBを基準レベルとする.
17.REC MUTE効果チェック	同上	1kHz/+1dB	チェック	入力信号を録音し,途中でREC MUTE釦を押して無信号録音部分をつくる(REC MUTEランプが点灯を確認). テープを再生して, 信号部分と無信号部分との出力レベル差. 65dB以上(1kHz.B.P.F使用)	
18.ドルビーNR効果チェック (B-TYPE)	同上	LINE IN： 1kHz/−29dB	チェック	NR SYSTEMスイッチを□□B(□□)にして信号を録音する. このテープを再生し, スイッチをOUT↔□□B(□□)と切り換えたときの出力レベル変化. 3〜8dB	
		10kHz/−39dB	チェック	測定法：同上	8〜12dB
19.ドルビーNR効果チェック (C-TYPE) (V-500Xのみ)	同上	LINE IN： 1kHz/−39dB	チェック	NR SYSTEMスイッチを□□Cにして信号を録音し, このテープを再生してスイッチをOUT↔□□Cと切り換えたときの出力レベル変化.	16〜20dB
		10kHz/−49dB	チェック	測定法：同上	16〜20dB
20.dbx調整	TAPE SELECTOR ：NORMAL NR SYSTEM：dbx	LINE IN： 1kHz/−24dB	SR971	15mV	R984(1kΩ)の両端電圧

5-4 ADJUSTMENTS AND TEST POINT LOCATIONS
調整部およびテスト・ポイントの位置

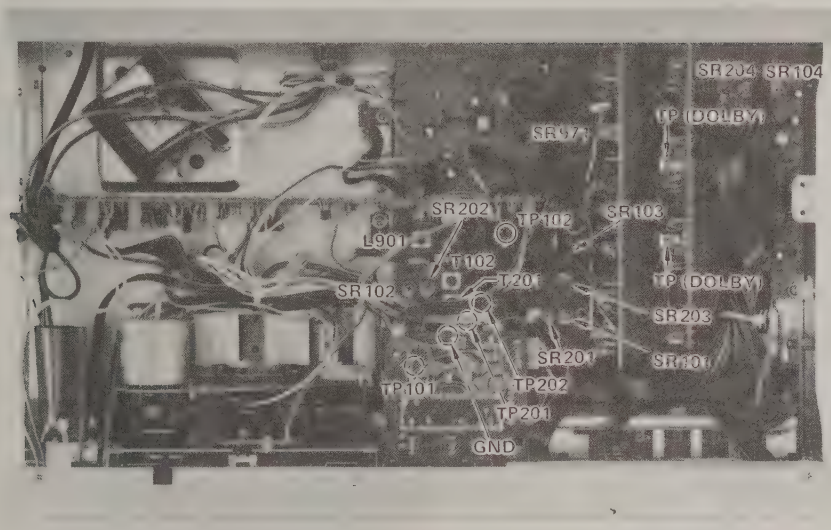


Fig. 5-10 V-500X

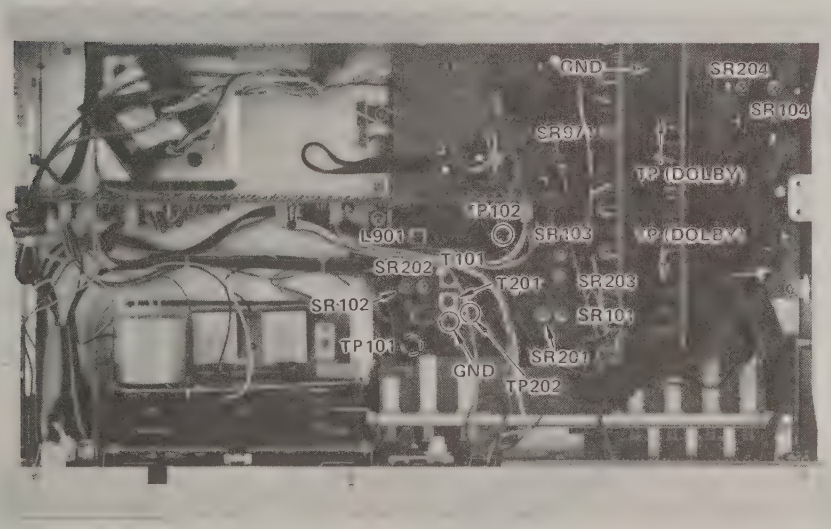
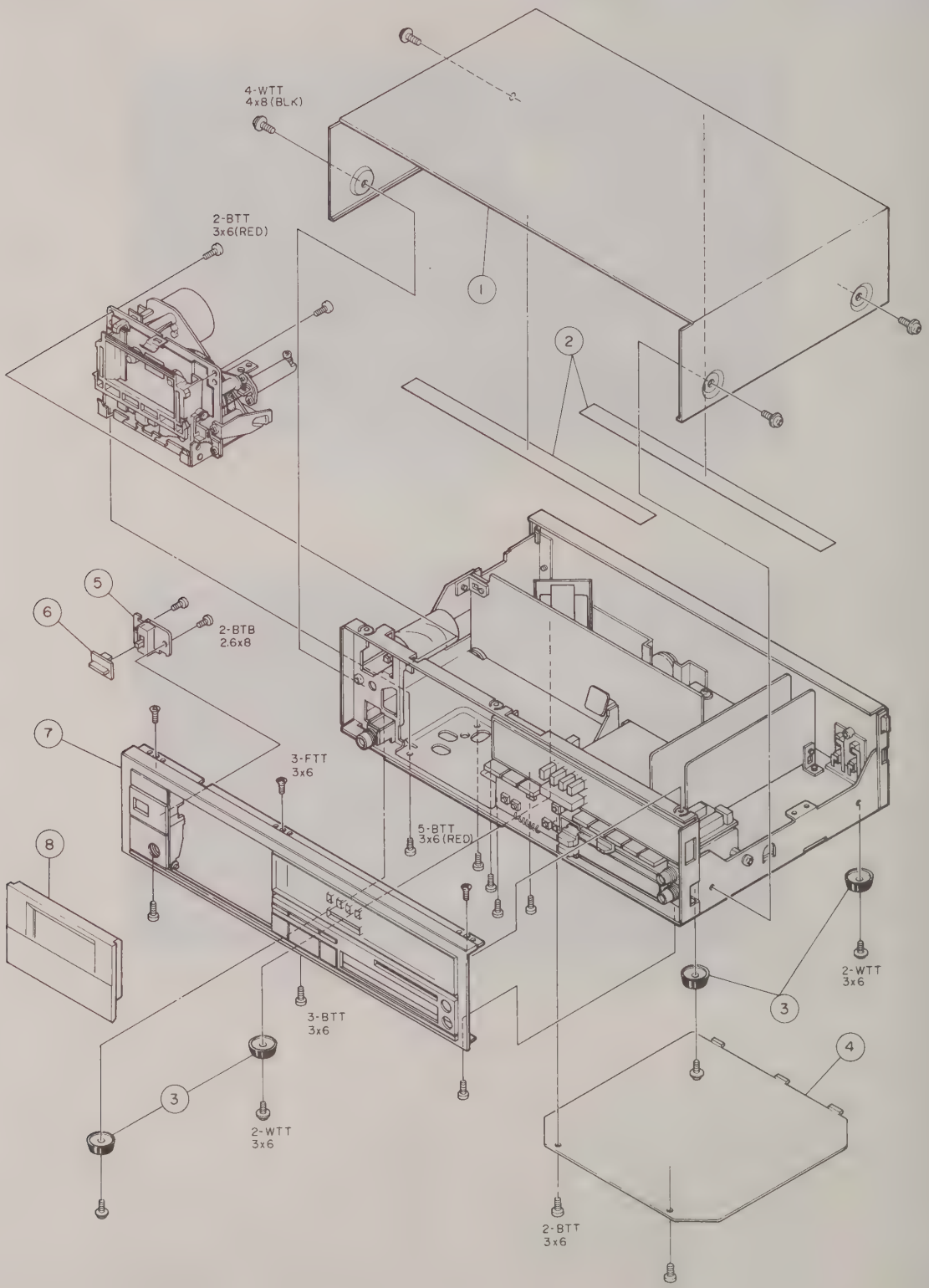


Fig. 5-11 V-400X

SR101/SR201	Output level	出力レベル
SR102/SR202	Record bias	録音バイアス
SR103/SR203	Record level	録音レベル
SR104/SR204	Peak program level meter	ピーク・フログラム・レベル・メーター
SR971	dbx CURRENT SOURCE	dbx カレント・ソース
L901	Bias OSC frequency	バイアス発振器周波数
T101/T201	Bias trap	バイアス・トラップ

6 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW-1



REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
1 - 1	*5760535000	Cover, Top		
1 - 2	*5760404900	Cushion, C	V-300	
1 - 3	5760405100	Foot	V-300	
1 - 4	*5760460700	Cover, Bottom	V-300	
1 - 5	*5760506900	PCB Assy, TIMER		
1 - 6	5760514300	Button, TIMER		
1 - 7	*5760539100	Panel Assy, Front (V-500X)		
	*5760514100	Panel Assy, Front (V-400X)		
1 - 8	5760514210	Cover Assy, Cassette (V-500X)		
	5760514200	Cover Assy, Cassette (V-400X)		

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
	*5700049400	Owner's Manual, V-500X/V-400X [All except J]		
	*5700049700	Owner's Manual, V-500X [J]		

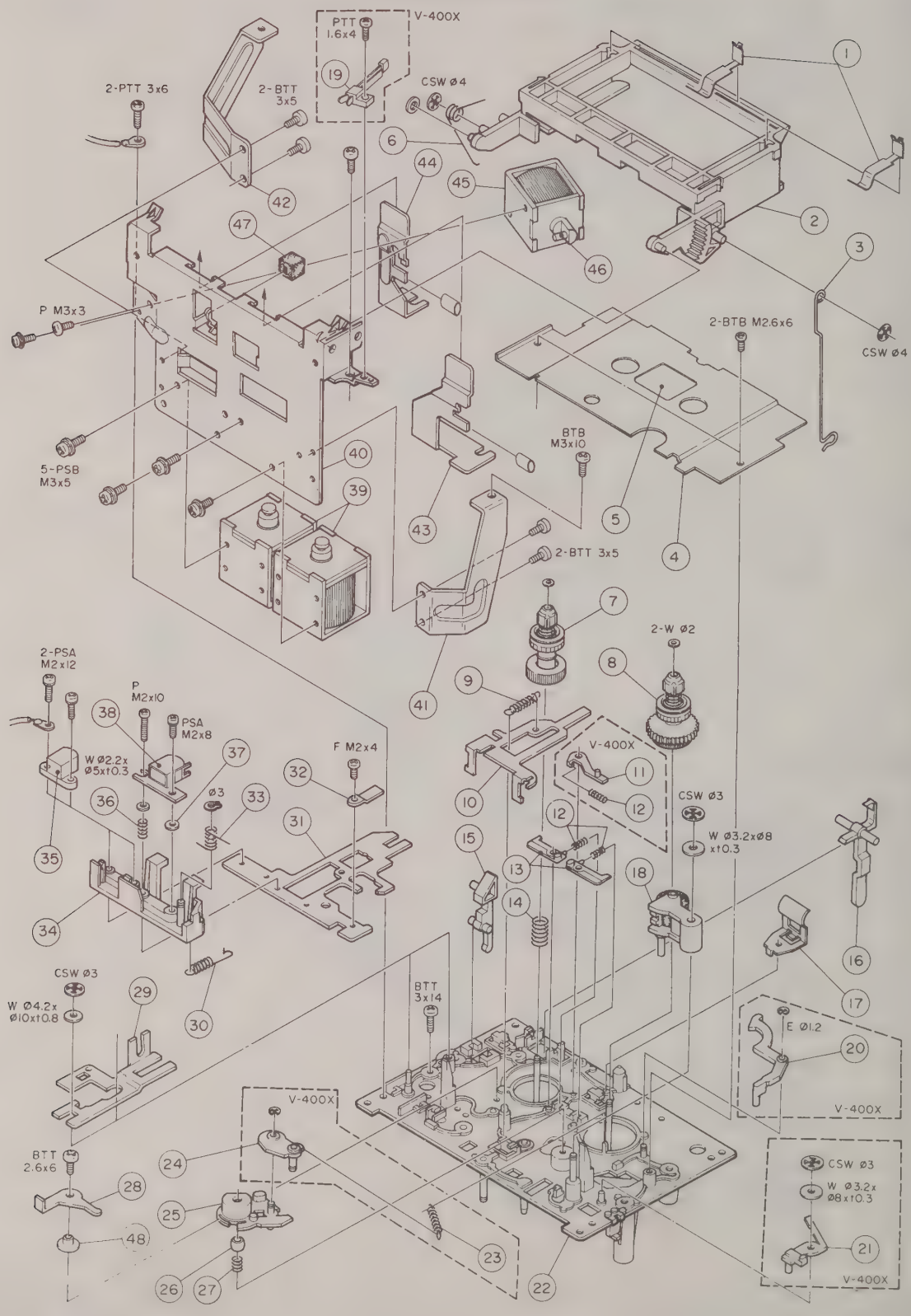
(Continued from page 21)

REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
4 - 40	5760504800	Switch, Push (V-400X)		
4 - 41	*5760504100	Chassis, Front		
4 - 42	*5760506400	PCB Assy, HEADPHONE		
4 - 43	⚠ 5760513500	Switch, Power		
4 - 44	⚠ 5760513600	Ceramic Cap. 0.047μF/250V [J, U, C]		
	⚠ 5760513700	Ceramic Cap. 0.01μF/250V [GE]		
	⚠ 5760513800	Ceramic Cap. 0.047μF [E, UK, A]		
4 - 45	5760514400	Button, A; NORMAL		
4 - 46	5760514500	Button, B; CrO_2		
4 - 47	5760514600	Button, C; METAL		
4 - 48	5760514700	Button, D; OUT		
4 49	5760514800	Button, E; DOLBY (V-400X)		
4 - 50	5760514900	Button, F; DBX		
4 - 51	5760515000	Button, G; DBX DISC		
4 - 52	5760539200	Button, H; DOLBY B (V-500X)		
4 - 53	5760539300	Button, I; DOLBY C (V-500X)		
4 - 54	*5760151100	Lug Plate, Relay [E, UK, A]	V-300	
4 - 55	*5760504900	Clamper, Cord		
4 - 56	*5760513900	Shield Core, A [J, U, C]		
	*5760514000	Shield Core, B [GE, E, UK, A]		
4 - 57	*5760539000	Clamper, Transformer (V-500X)		
4 - 58	*5760541300	Holder, Counter (V-500X)		

Parts marked with *require longer delivery time.

[U] : U.S.A. [C] : CANADA [GE] : GENERAL EXPORT
[A] : AUSTRALIA [E] : EUROPE [UK] : U.K.
[J] : JAPAN

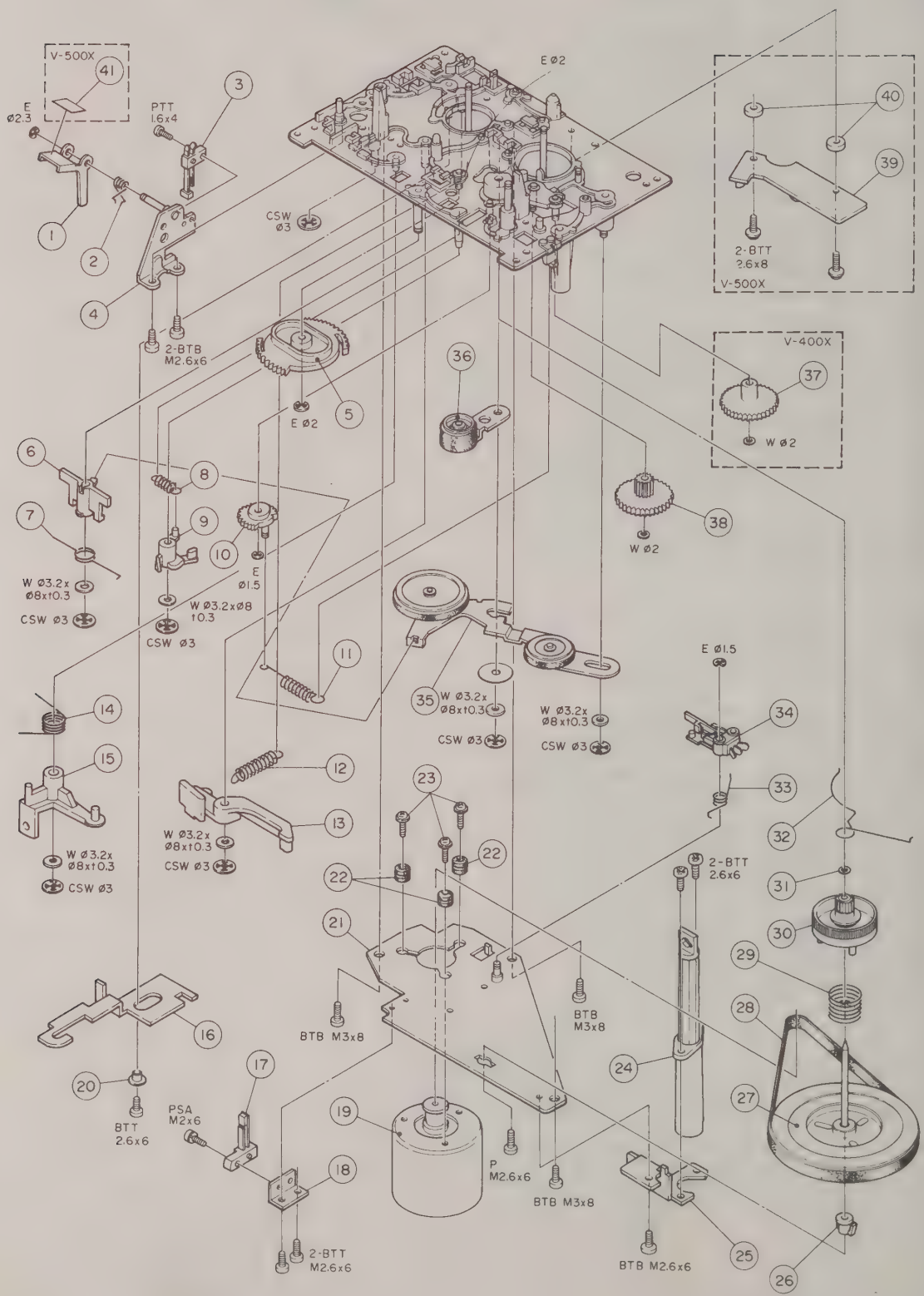
EXPLODED VIEW- 2



REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
2 - 1	*5760393500	Spring, Cassette Pressure	V-33	
2 - 2	*5760502200	Holder, Cassette		
2 - 3	*5760459200	Spork, Damper	V-300	
2 - 4	*5760394001	Cover, Chassis; B	V-33	
2 - 5	*5760394100	Plate, Refractive	V-33	
2 - 6	5760393600	Spring, Ccssette Holder; D		
2 - 7	5760536700	Reel Assy, Supply; B (V-500X)		
	5760391600	Reel Assy, Supply (V-400X)		
2 - 8	5760536600	Reel Assy, Take-up; D (V-500X)		
	5760391800	Reel Assy, Take-up; B (V-400X)		
2 - 9	5760391100	Spring, FF Lever; B	V-33	
2 - 10	*5760501500	Lever, FF; B		
2 - 11	*5760387400	Lever, Auto (V-400X)	V-33	
2 - 12	5760390700	Spring, Brake	V-33	
2 - 13	*5760390600	Arm, Brake	V-33	
2 - 14	5760391700	Spring, BT; D	V-33	
2 - 15	*5760392800	Arm, Door Lock	V-33	
2 - 16	*5760501400	Arm Assy		
2 - 17	*5760393700	Spring, Cassette Pressure; C	V-33	
2 - 18	5760501200	Pinch RollerAssy, B		
2 - 19	5760395300	Switch Lief (V-400X)		
2 - 20	*5760390100	Arm, Auto Stop (V-400X)	V-33	
2 - 21	*5760390200	Arm, Kick (V-400X)	V-33	
2 - 22	*5760386801	Chassis Assy, Mechanism	V-33	
2 - 23	5199047000	Spring, P.Pulley (V-400X)	V-33	
2 - 24	*5760388700	Arm, Cam Gear (V-400X)	V-33	
2 - 25	*5760390400	Arm, P. Pulley	V-33	
2 - 26	5199041000	Metal, Flywheel		
2 - 27	5199088000	Spring, Earth	V-33	
2 - 28	*5760502500	Lever		
2 - 29	*5760502000	Lever, Eject; B		
2 - 30	5760390000	Spring, Lift	V-33	
2 - 31	*5760501100	Chassis, Head; B		
2 - 32	*5760387300	Plate, Thrust	V-33	
2 - 33	5760387600	Spring, Pinch Roller	V-33	
2 - 34	*5760387000	Stand, Head	V-33	
2 - 35	5760387200	Head Assy, ERASE	V-33	
2 - 36	5760388000	Spring, Head Azimuth; B	V-33	
2 - 37	*5760501300	Washer, Head		
2 - 38	5378901800	Head Assy, REC/PLAY (V-500X)		
	5760387100	Head Assy, REC/PLAY (V-400X)	V-33	
2 - 39	5760503800	Solenoid, FF/REW		
2 - 40	*5760502800	Holder Assy, Solenoid; C		
2 - 41	*5760503600	Bracket, R		
2 - 42	*5760503700	Bracket, L		
2 - 43	*5760502300	Arm, FF Solenoid		
2 - 44	*5760502400	Arm, REW Solenoid		
2 - 45	5760503700	Solenoid, PLAY		
2 - 46	*5760503200	Pin, Solenoid		
2 - 47	*5760502600	Cushion		
2 - 48	*5760502700	Collar, Lever		

Parts marked with *require longer delivery time.

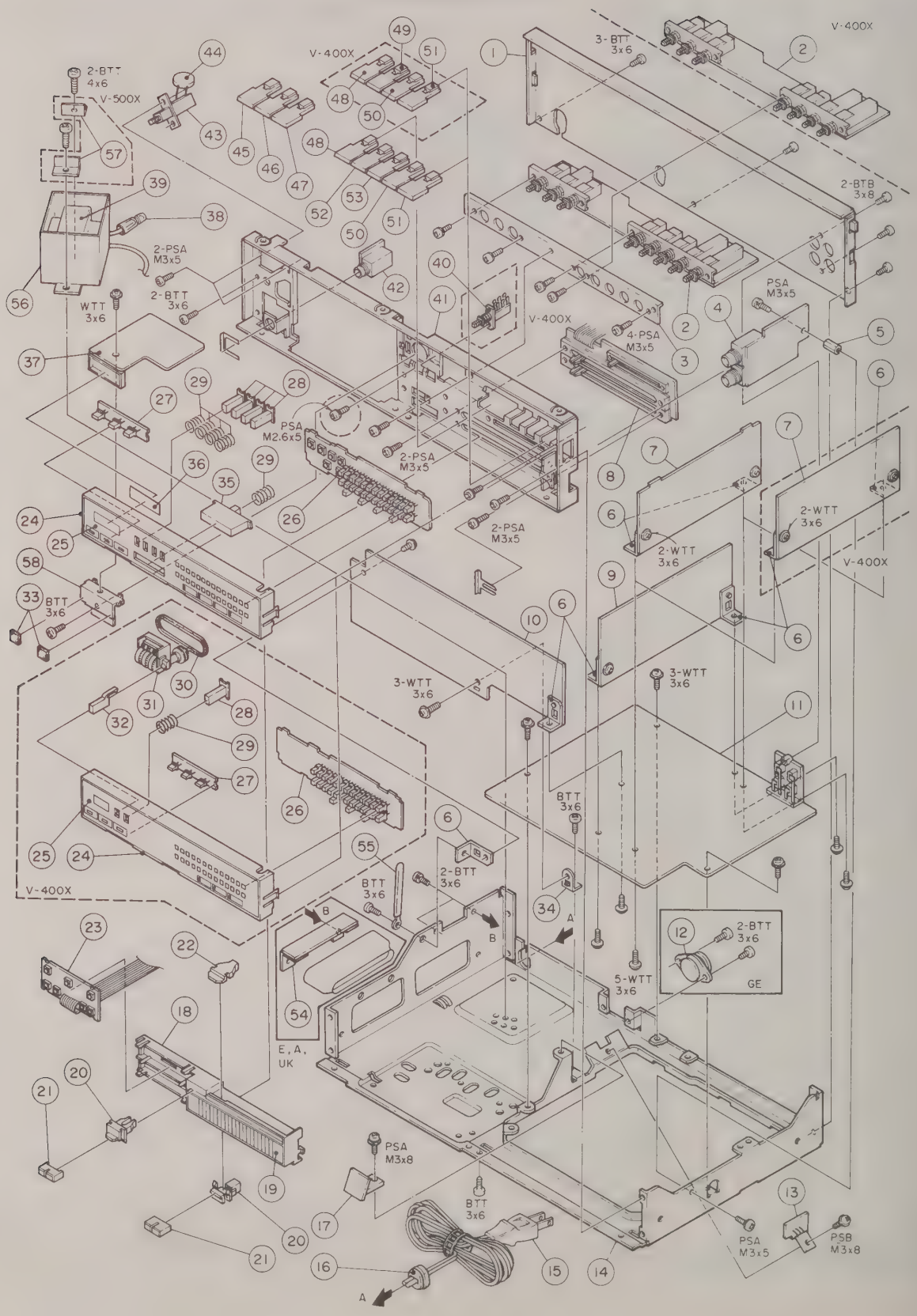
EXPLODED VIEW- 3



REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
3 - 1	*5760458700	Lever, Eject	V-300	
3 - 2	5760501900	Spring, Eject Lever; B		
3 - 3	5760395300	Switch, Lief		
3 - 4	*5760458800	Base, Eject Lever		
3 - 5	*5760388900	Cam, A	V-33	
3 - 6	*5760390800	Arm, FF	V-33	
3 - 7	5760391000	Spring, FF Arm	V-33	
3 - 8	5760389600	Spring, Cam Stopper; B	V-33	
3 - 9	*5760389300	Stopper, Cam; B	V-33	
3 - 10	*5760389000	Cam, B	V-33	
3 - 11	5760389700	Spring, Cam; B	V-33	
3 - 12	5760389500	Spring, Cam Lever	V-33	
3 - 13	*5760389100	Lever, Cam	V-33	
3 - 14	5760501700	Spring, Cam Stopper; A		
3 - 15	*5760501600	Stopper, Cam; A		
3 - 16	*5760502100	Lever, Eject; D		
3 - 17	5760541000	Switch, Lief		
3 - 18	*5760503400	Bracket, Switch		
3 - 19	5760535100	Motor, DC		
3 - 20	*5760503100	Collar, Hook Lever		
3 - 21	*5760501800	Plate, Flywheel-reputation		
3 - 22	*5760394200	Cushion, Motor	V-33	
3 - 23	*5760394300	Screw, Motor Install	V-33	
3 - 24	5760470200	Damper Assy		
3 - 25	*5760459100	Holder, Damper	V-300	
3 - 26	5760388400	Shaft-reputation, Flywheel	V-33	
3 - 27	5760388100	Flywheel, Capstan	V-33	
3 - 28	5760388200	Belt	V-33	
3 - 29	5760388500	Spring, Thurst	V-33	
3 - 30	*5760390300	Clutch	V-33	
3 - 31	*5760390500	Washer	V-33	
3 - 32	5760389900	Spring, Cam; A	V-33	
3 - 33	5760503000	Spring, Switch		
3 - 34	5760541100	Switch, Skelton		
3 - 35	5760391900	Pulley Assy, Idler; A	V-33	
3 - 36	5760392000	Pulley Assy, Idler; C	V-33	
3 - 37	5760388800	Gear, Cam; B (V-400X)	V-33	
3 - 38	5760388600	P. Pulley, B	V-33	
3 - 39	*5760536800	PCB, SENSOR (V-500X)		
	5760536900	Photo Sensor NJL5141EB (V-500X)		
	5172236000	Ceramic Cap. 0.01μF, (C27) (V-500X)		
3 - 40	*5760541200	Stud, Sensor PCB (V-500X)		
3 - 41	*5760536300	Sheet (V-500X)		

Parts marked with *require longer delivery time.

EXPLODED VIEW-4



REF. NO.	PARTS NO.	DESCRIPTION	COMMON MODELS	REMARKS
4 - 1	*5760537701	Panel, Rear [J] (V-500X)		
	*5760537801	Panel, Rear [U] (V-500X)		
	*5760537901	Panel, Rear [C] (V-500X)		
	*5760538001	Panel, Rear [GE] (V-500X)		
	*5760538101	Panel, Rear [E] (V-500X)		
	*5760538201	Panel, Rear [UK] (V-500X)		
	*5760538301	Panel, Rear [A] (V-500X)		
	*5760505001	Panel, Rear [U] (V-400X)		
	*5760505101	Panel, Rear [C] (V-400X)		
	*5760505201	Panel, Rear [GE] (V-400X)		
	*5760505301	Panel, Rear [E] (V-400X)		
	*5760505401	Panel, Rear [UK, A] (V-400X)		
4 - 2	*5760507510	PCB Assy, SW. (V-500X)		
	*5760507500	PCB Assy, SW. (V-400X)		
4 - 3	*5760504400	Holder, SW. PCB Assy		
4 - 4	*5760506600	PCB Assy, MIC AMPL.		
4 - 5	*5760504700	Stud, MIC AMPL. PCB Assy		
4 - 6	*5760504500	Bracket, L		
4 - 7	*5760516700	PCB Assy, DOLBY B/C (V-500X)		
	*5760507300	PCB Assy, DOLBY B (V-400X)		
4 - 8	*5760506700	PCB Assy, VR		
4 - 9	*5760507400	PCB Assy, dbx		
4 - 10	*5760507010	PCB Assy, CONTROL (V-500X)		
	*5760507000	PCB Assy, CONTROL (V-400X)		
4 - 11	*5760506210	PCB Assy, REC/PLAY AMPL. (V-500X)		
	*5760506200	PCB Assy, REC/PLAY AMPL. (V-400X)		
4 - 12	⚠*5760152000	Voltage Selecter [GE]		
4 - 13	*5760506300	PCB Assy, REGULATOR		
4 - 14	*5760504001	Chassis, Main		
4 - 15	⚠ 5760150300	Cord, AC Power [J, U, C, GE]		
	⚠ 5760150500	Cord, AC Power [E]		
	⚠ 5760150600	Cord, AC Power [UK]		
	⚠ 5760150700	Cord, AC Power [A]		
4 - 16	⚠*5760150800	Strain, Relief [All except UK]		
	⚠*5760150900	Strain, Relief [UK]		
4 - 17	*5760506500	PCB Assy, TRANSISTOR		
4 - 18	*5760505900	Guide, Volume Knob		
4 - 19	*5760506000	Indicator, VR		
4 - 20	5760465600	Base, Knob		
4 - 21	5760465500	Knob, RECORD VR		
4 - 22	5760506100	Knob, OUTPUT VR		
4 - 23	*5760507100	PCB Assy, OPERATION SW.		
4 - 24	*5760505500	Base, Meter		
4 - 25	5760537200	Indicator, Meter (V-500X)		
	5760505600	Indicator, Meter (V-400X)		
4 - 26	*5760506810	PCB Assy, METER (V-500X)		
	*5760506800	PCB Assy, METER (V-400X)		
4 - 27	*5760507200	PCB Assy, LED		
4 - 28	5760537300	Button, MEMORY (V-500X)		
	5760505700	Button, MEMORY (V-400X)		
4 - 29	5760505800	Spring, Compression Coil; C		
4 - 30	5760393900	Belt, Counter (V-400X)		
4 - 31	5760504200	Counter, Tape (V-400X)		
4 - 32	5760504300	Button, RESET (V-400X)		
4 - 33	*5760537600	Cushion, Meter; B (V-500X)		
4 - 34	*5760504600	Bracket, A		
4 - 35	5760537400	Button, CPS (V-500X)		
4 - 36	*5760537100	Window, Counter (V-500X)		
4 - 37	*5760537000	Counter, FL (V-500X)		
4 - 38	*5760151000	Terminal [U, C, GE]		
4 - 39	⚠ 5760538900	Transformer, Power [J] (V-500X)		
	⚠ 5760512900	Transformer, Power [U, C]		
	⚠ 5760513000	Transformer, Power [GE]		
	⚠ 5760513100	Transformer, Power [E]		
	⚠ 5760513200	Transformer, Power [UK]		
	⚠ 5760513300	Transformer, Power [A]		

(Continued on page 15)

Parts marked with *require longer delivery time.

[U] : U.S.A. [C] : CANADA [GE] : GENERAL EXPORT
[A] : AUSTRALIA [E] : EUROPE [UK] : U.K.
[J] : JAPAN

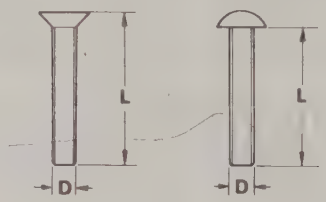
ASSEMBLING HARDWARE CODING LIST

All screws conform to ISO standards, and have crossrecessed heads, unless otherwise noted. ISO screws have the head inscribed with a point as in the figure to the right.

FOR EXAMPLE:

B M3 x 6

- Length in mm (L)
- Diameter in mm (D) *
- Metric System
- Nomenclature



* Inner dia. for washers and nuts

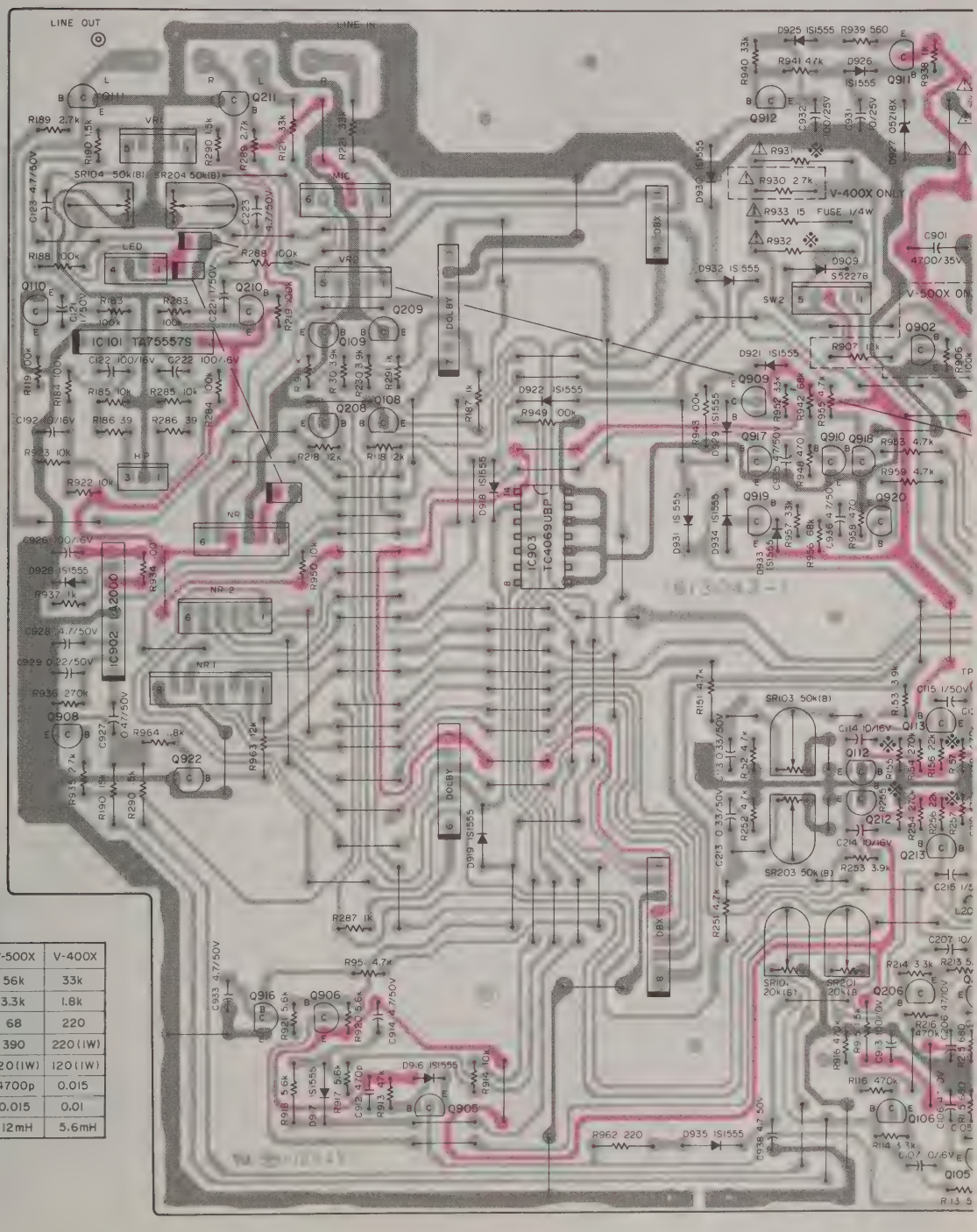
	Code	Name	Type
MACHINE SCREW	R	Round Head Screw	
	P	Pan Head Screw	
	T	Stove Head Screw (Truss)	
	B	Binding Head Screw	
	F	Flat Countersunk Head Screw	
	O	Oval Countersunk Head Screw	
WOOD SCREW	RW	Round Head Wood Screw	
TAPTITE SCREW	PTT	Pan Head Taptite Screw	
	WTT	Washer Head Taptite Screw	
SEMS SCREW	BSA	Binding Head SEMS Screw(A Type)	
	BSB	Binding Head SEMS Screw(B Type)	
	BSF	Binding Head SEMS Screw(F Type)	
	PSA	Pan Head SEMS Screw(A Type)	
	PSB	Pan Head SEMS Screw(B Type)	

	Code	Name	Type
TAPPING SCREW	BTA	Binding Head Tapping Screw(A Type)	
	BTB	Binding Head Tapping Screw(B Type)	
	RTA	Round Head Tapping Screw(A Type)	
	RTB	Round Head Tapping Screw(B Type)	
SETSCREW	SF	Hex Socket Setscrew(Flat Point)	
	SC	Hex Socket Setscrew(Cup Point)	
	SS	Slotted Socket Setscrew(Flat Point)	
WASHER	E	E-Ring (Retaining Washer)	
	W	Flat Washer (Plain)	
	SW	Lock Washer (Spring)	
	LWI	Lock Washer (Internal Teeth)	
	LWE	Lock Washer (External Teeth)	
	TW	Trim Washer (Countersunk)	
NUT	N	Hex Nut	

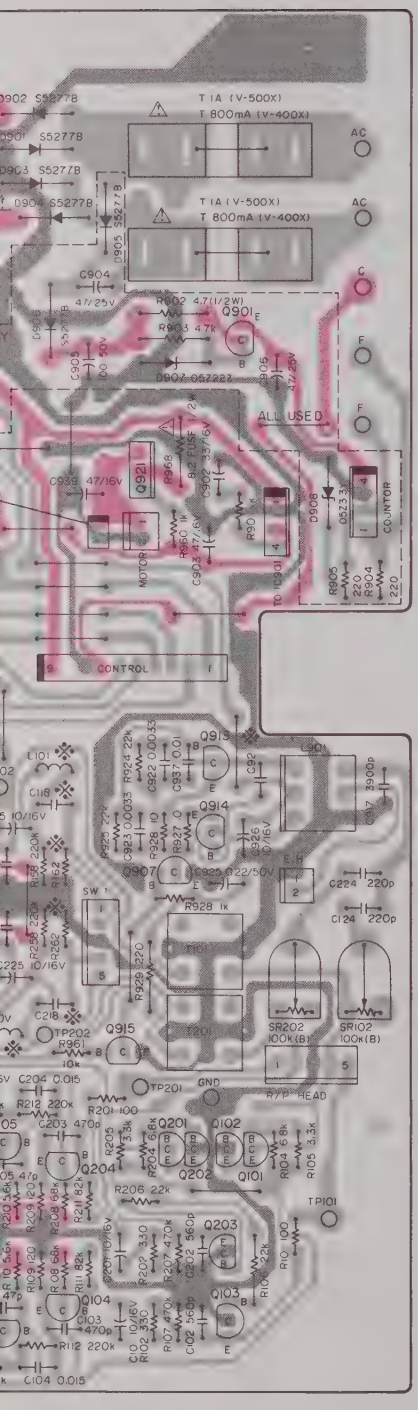
7 PC BOARDS AND PARTS LIST

PC Boards shown viewed from foil side.

REC/PLAY AMPL. PCB Assy



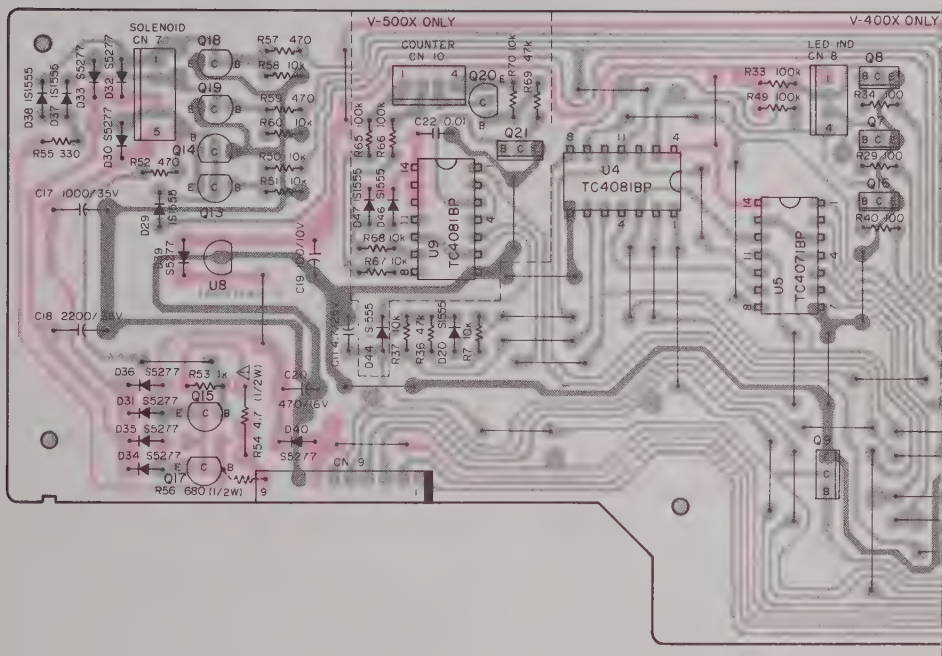
	V-500X	V-400X
R155, R255	56k	33k
R157, R257	3.3k	1.8k
R162, R262	68	220
R931	390	220 (1W)
R932	220 (1W)	120 (1W)
C118, C218	4700p	0.015
C921	0.015	0.01
L101, L201	12mH	5.6mH



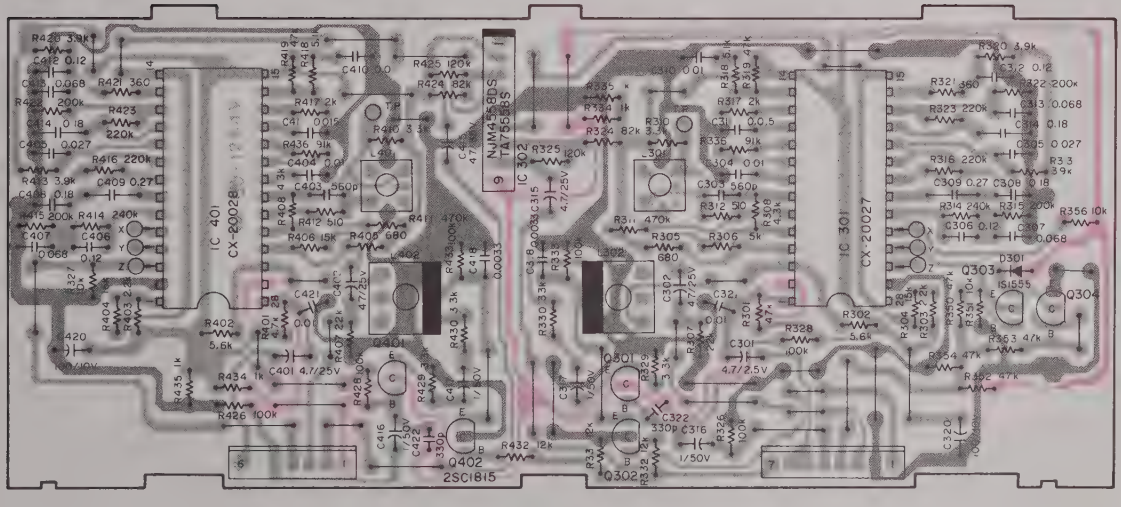
NOTES

1. PC Boards shown viewed from foil side.
2. The colors used on the PCB illustrations have the following significance:
   - : +B power supply circuit
   - : GND
   - : Other
3. Resistor values are in ohms (k = 1,000 ohms).
4. All capacitor values are in microfarads (p = picofarads).

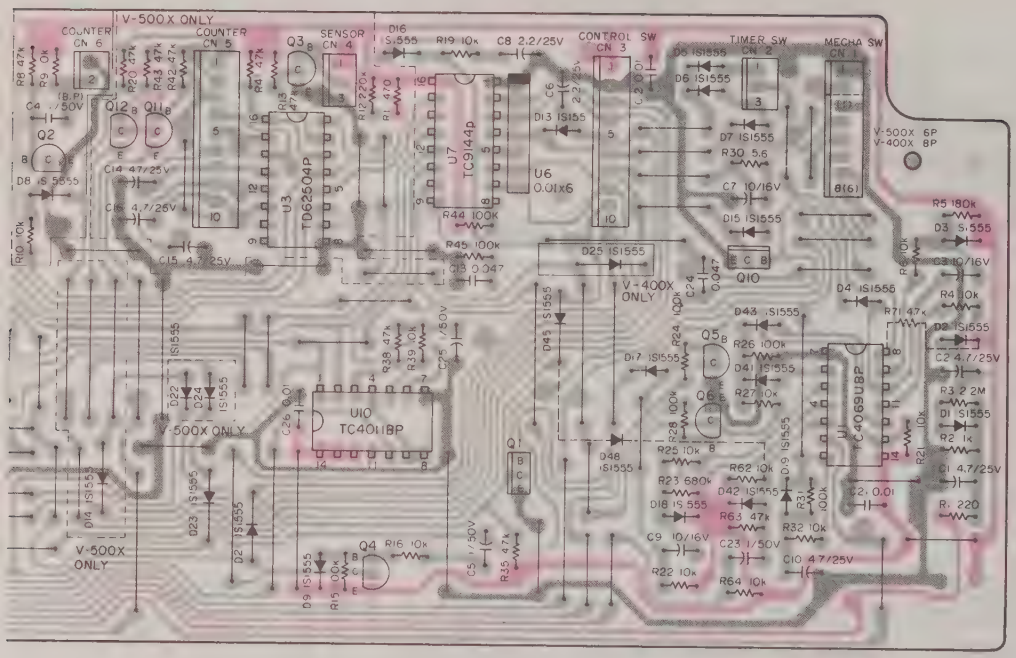
CONTROL



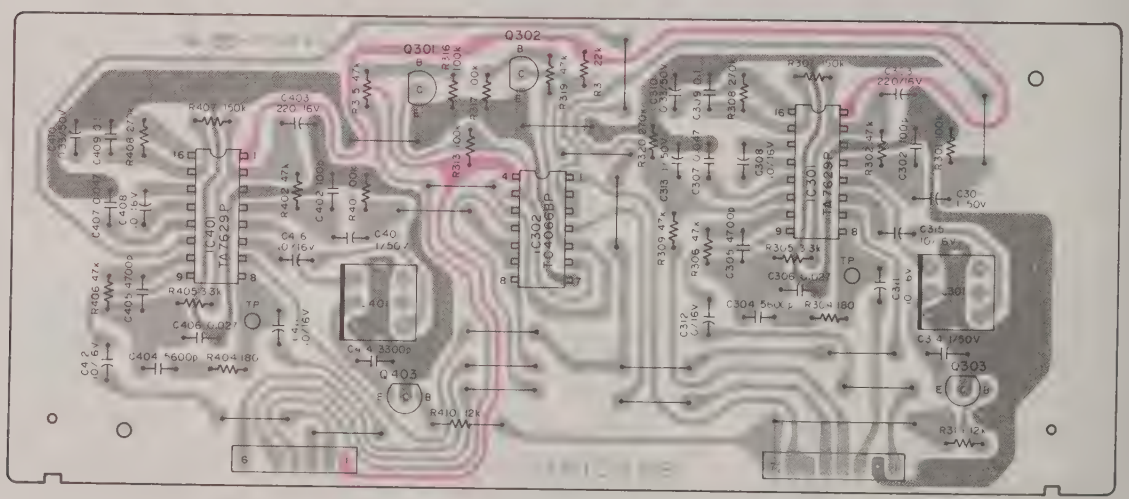
DOLBY B/C PCB Assy (V-500X)



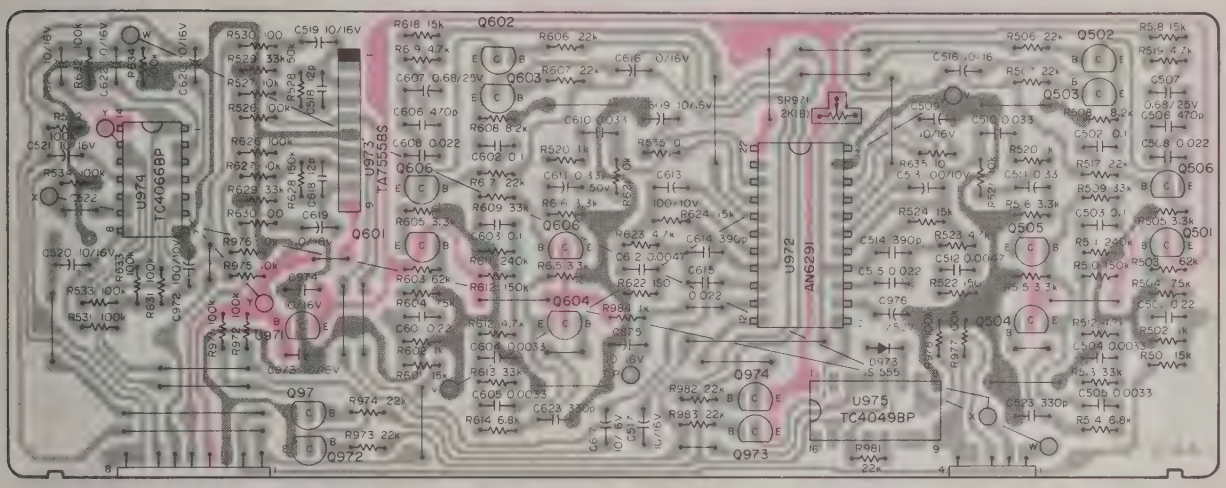
PCB Assy



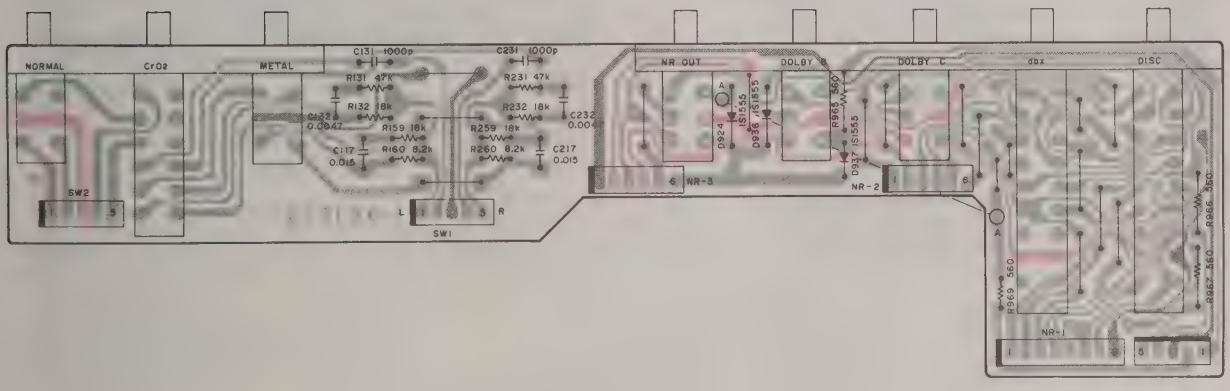
DOLBY B PCB Assy (V-400X)



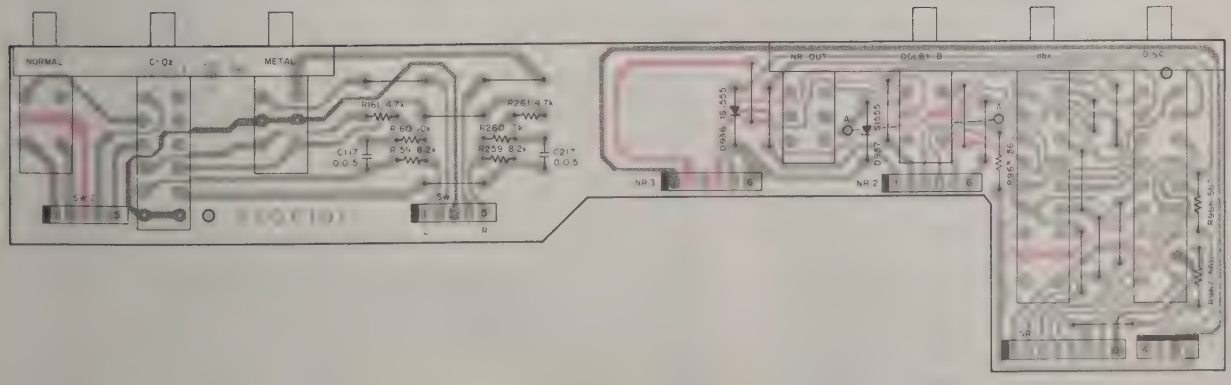
DBX PCB Assy



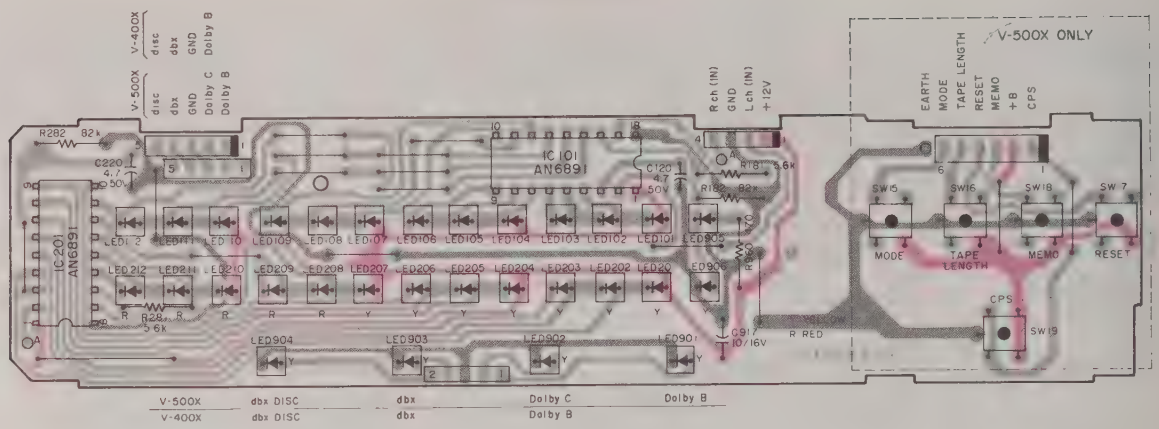
NR SW. PCB Assy (V-500X)



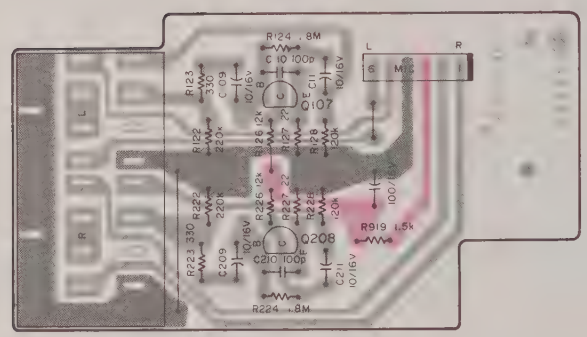
NR SW. PCB Assy (V-400X)



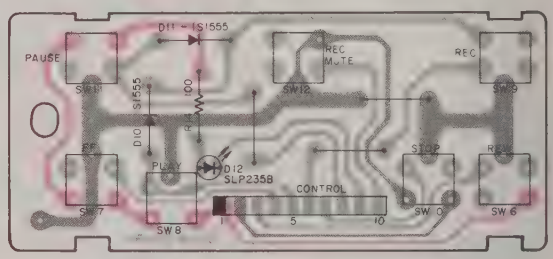
METER PCB Assy



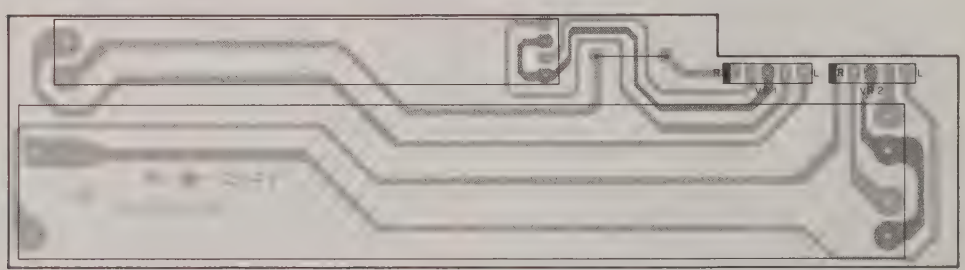
MIC PCB Assy



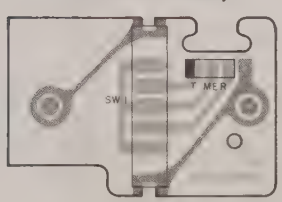
OPERATION SW . PCB Assy



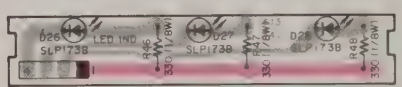
VR PCB Assy



TIMER PCB Assy



LED PCB Assy



REC/PLAY AMPL. PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760506210	PCB Assy (V-500X)
	5760506200	PCB Assy (V-400X)
	5760507600	PCB
	IC's	
U101	5760398900	TA75557S
U902	5220418000	LA2000
U903	5220019400	TC4069UBP
	TRANSISTORS	
Q101, Q201	5230770100	2SC2240BL
Q102, Q202	5230770100	2SC2240BL
Q103, Q203	5230774900	2SC2878A
Q104, Q204	5230770100	2SC2240BL
Q105, Q205	5230770100	2SC2240BL
Q106, Q206	5760507700	2SJ103Y, FET
Q108, Q208	5145151000	2SC1815GR
Q109, Q209	5145151000	2SC1815GR
Q110, Q210	5145151000	2SC1815GR
Q111, Q211	5145151000	2SC1815GR
Q112, Q212	5230774900	2SC2878A
Q113, Q213	5145151000	2SC1815GR
Q901	5230773800	2SC2655Y (V-500X)
Q905, Q906	5145150000	2SA1015GR
Q907, Q908	5145151000	2SC1815GR
Q909	5145150000	2SA1015GR
Q910, Q911	5145151000	2SC1815GR
Q912	5145150000	2SA1015GR
Q213～Q918	5145151000	2SC1815GR
Q919	5145150000	2SA1015GR
Q920, Q922	5145151000	2SC1815GR
	DIODES	
D901～D904	⚠5760088800	S5277B
D905, D906	5760088800	S5277B (V-500X)
D907	5760538400	05Z22Z, Zener (V-500X)
D908	5760538500	05Z3.3Y, Zener (V-500X)
D916～D919	5760399200	1S1555
D921～D923	5760399200	1S1555
D925, D926	5760399200	1S1555
D927	5760507800	05Z18X, Zener
D928～D935	5760399200	1S1555
	RESISTORS	
	All resistors are rated ±5% tolerance and ¼W and are carbon type unless otherwise noted.	
R101, R201	5240165800	100Ω
R102, R202	5240167000	330Ω
R104, R204	5240170200	6.8kΩ
R105, R205	5240169400	3.3kΩ
R106, R206	5240171400	22kΩ
R107, R207	5240174600	470kΩ
R108, R208	5240172600	68kΩ
R109, R209	5240166000	120Ω
R110, R210	5240170000	5.6kΩ
R111, R211	5240172800	82kΩ
R112, R212	5240173800	220kΩ
R113, R213	5240169900	5.1kΩ
R114, R214	5240169400	3.3kΩ
R115, R215	5240167800	680Ω
R116, R216	5240174600	470kΩ
R118, R218	5240170800	12kΩ
R119, R219	5240169200	2.7kΩ
R121, R221	5181518000	33kΩ
R130, R230	5240169600	3.9kΩ
R151, R251	5181498000	4.7kΩ

REF. NO.	PARTS NO.	DESCRIPTION
R152, R252	5240169800	4.7kΩ
R153, R253	5240169600	3.9kΩ
R154, R254	5240174000	270kΩ
R155, R255	5240172400	56kΩ (V-500X)
R155, R255	5240171800	33kΩ (V-400X)
R156, R256	5240171400	22kΩ
R157, R257	5240169400	3.3kΩ (V-500X)
R157, R257	5240168800	1.8kΩ (V-400X)
R158, R258	5240173800	220kΩ
R162, R262	5240165400	68Ω (V-500X)
R162, R262	5240166600	220Ω (V-400X)
R183, R283	5240169000	2.2kΩ
R184, R284	5240173000	100kΩ
R185, R285	5240170600	10kΩ
R186, R286	5240164800	39Ω
R187, R287	5240168200	1kΩ
R188, R288	5240173000	100kΩ
R189, R289	5240169200	2.7kΩ
R190, R290	5240168600	1.5kΩ
R191, R291	5240168200	1kΩ
R192, R292	5181510000	15kΩ
R901	5240168200	1kΩ
R902	⚠5760538700	4.7Ω ½W Fuse (V-500X)
R903	5181498000	4.7kΩ (V-500X)
R904, R905	5240166600	220Ω (V-500X)
R913	5240172200	47kΩ
R914	5240170600	10kΩ
R915	5181486000	1.5kΩ
R916	5240174600	470kΩ
R917	5240170000	5.6kΩ
R918	5181500000	5.6kΩ
R920, R921	5240170000	5.6kΩ
R922, R923	5240170600	10kΩ
R924, R925	5240171400	22kΩ
R926, R927	5240163400	10Ω
R928	5240168200	1kΩ
R929	5181466000	220Ω
R930	5181492000	2.7kΩ (V-400X)
R931	⚠5181472000	390Ω (V-500X)
R931	⚠5760538800	220Ω 1W (V-400X)
R932	⚠5760538800	220Ω 1W (V-500X)
R932	⚠5760401900	120Ω 1W (V-400X)
R933	⚠5760508800	15Ω, Fuse
R934	5240165800	100Ω
R935	5240169200	2.7kΩ
R936	5240174000	270kΩ
R937, R938	5240168200	1kΩ
R939	5240167600	560Ω
R940	5240171800	33kΩ
R941	5240172200	47kΩ
R942	5240172600	68kΩ
R943	5181530000	100kΩ
R948	5240167400	470Ω
R949	5181530000	100kΩ
R950	5240170600	10kΩ
R951	5181498000	4.7kΩ
R952	5240171800	33kΩ
R953	5181498000	4.7kΩ
R955	5240169800	4.7kΩ
R956	5240172600	68kΩ
R957	5240171800	33kΩ
R958	5240167400	470Ω
R959	5240169800	4.7kΩ
R960	5240168200	1kΩ
R961	5240170600	10kΩ
R962	5181466000	220Ω
R963	5181508000	12kΩ
R964	5240168800	1.8kΩ
R968	⚠5760508900	8.2Ω ½W Fuse

REF. NO.	PARTS NO.	DESCRIPTION		
		CAPACITORS		
C101, C201	5260162550	Elec.	10μF	16V
C102, C202	5172221000	Mylar	560pF	
C103, C203	5172220000	Ceramic	470pF	
C104, C204	5171860000	Mylar	0.015μF	
C105, C205	5172208000	Ceramic	47pF	
C106, C206	5260165052	Elec.	47μF	10V
C107, C207	5260162550	Elec.	10μF	16V
C113, C213	5260220850	Elec.	0.33μF	50V
C114, C214	5260162550	Elec.	10μF	16V
C115, C215	5260160750	Elec.	1μF	50V
C118, C218	5170368000	Mylar	4700pF	(V-500X)
C118, C218	5171860000	Mylar	0.015μF	(V-400X)
C119, C219	5172220000	Ceramic	470pF	
C121, C221	5260160750	Elec.	1μF	50V
C122, C222	5260166052	Elec.	100μF	16V
C123, C223	5260162150	Elec.	4.7μF	50V
C124, C224	5172216000	Ceramic	220pF	
C125, C225	5260162550	Elec.	10μF	16V
C901	⚠5760509000	Elec.	4700μF	35V
C902	5260164252	Elec.	33μF	16V
C903	5260165252	Elec.	47μF	25V
C904	5260165252	Elec.	47μF	25V (V-500X)
C905	5173048800	Elec.	100μF	50V (V-500X)
C906	5260165252	Elec.	47μF	25V (V-500X)
C912	5172220000	Ceramic	470pF	
C913	5260165952	Elec.	100μF	10V
C914	5260162150	Elec.	4.7μF	50V
C915	5760156900	Polysty.	3900pF	125V
C918, C920	5260162550	Elec.	10μF	16V
C921	5171860000	Mylar	0.015μF	(V-500X)
C921	5171856000	Mylar	0.01μF	(V-400X)
C922, C923	5170364000	Mylar	3300pF	
C925	5260220750	Elec.	0.22μF	50V
C926	5260166052	Elec.	100μF	16V
C927	5260160550	Elec.	0.47μF	50V
C928	5260162150	Elec.	4.7μF	50V
C929	5260220750	Elec.	0.22μF	50V
C931	5260162650	Elec.	10μF	25V
C932	5260166152	Elec.	100μF	25V
C933	5260162150	Elec.	4.7μF	50V
C935, C936	5260162150	Elec.	4.7μF	50V
C937	5171856000	Mylar	0.01μF	
C938	5260162150	Elec.	4.7μF	50V
C939	5260162150	Elec.	47μF	16V
C941	5173434000	Ceramic	0.022μF	50V
		VARIABLE RESISTORS		
R11, R21	5150233000	Semi-fixed	20kΩ(B)	
R12, R22	5150096000	Semi-fixed	100kΩ(B)	
R13, R23	5150094000	Semi-fixed	50kΩ(B)	
R14, R24	5150094000	Semi-fixed	50kΩ(B)	
		MISCELLANEOUS		
T101, T201	5760398200	Coil, Bias Trap; 85kHz		
T901	5760398100	Coil, OSC		
L101, L201	5760538600	Coil, 12mH (V-500X)		
	5760398400	Coil, 5.6mH (V-400X)		
	5760508400	Connector Socket, 4P		
	5760508500	Connector Socket, 6P		
	5760508600	Connector Socket, 7P		
	5760508700	Connector Socket, 8P		
	5760397400	Holder, Fuse [E, UK, A]		
	⚠5760513400	Fuse, T800mA [E, UK, A]		

CONTROL PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760507010	PCB Assy (V-500X)
	5760507000	PCB Assy (V-400X)
	5760509100	PCB
		IC's
U1	5220019400	TC4069UBP
U3	5293000900	TD62504P (V-500X)
U4	5760509200	TC4081BP
U5	5220019500	TC4071BP
U6	5760509300	1810461
U7	5220019600	TC9144P
U8	5760509400	TA78L005AM
U9	5760509200	TC4081BP (V-500X)
U10	5220019100	TC4011BP
		TRANSISTORS
Q1	5760509500	2SC3402
Q2	5230770400	2SC1815BL (V-400X)
Q3	5230770400	2SC1815BL (V-500X)
Q4	5145150000	2SA1015GR
Q5, Q6	5230770400	2SC1815GR
Q7～Q10	5760509500	2SC3402
Q11, Q12	5230770400	2SC1815BL (V-500X)
Q13	5230770400	2SC1815BL
Q14～Q19	5230773800	2SC2655Y
		DIODES
D1～D7	5760399200	1S1555
D8	5760399200	1S1555 (V-400X)
D9, D13	5760399200	1S1555
D14	5760399200	1S1555 (V-500X)
D15～D23	5760399200	1S1555
D24	5760399200	1S1555 (V-500X)
D25	5760399200	1S1555 (V-400X)
D29	5760399200	1S1555
D30～D36	5760088800	S5277B
D37, D38	5760399200	1S1555
D39, D40	5760088800	S5277B
D41～D43	5760399200	1S1555
D44	5760399200	1S1555 (V-500X)
D46, D47	5760399200	1S1555 (V-500X)
D48	5760399200	1S1555
D49	5760399200	1S1555
		RESISTORS
		All resistors are rated ±5% tolerance and ¼W and are carbon type unless otherwise noted.
R1	5240166600	220Ω
R2	5240168200	1kΩ
R3	5240176200	2.2MΩ
R4	5240170600	10kΩ
R5	5240173600	180kΩ
R6	5240170600	10kΩ
R7	5240170600	10kΩ (V-500X)
R8	5240172200	47kΩ (V-400X)
R9, R10	5240170600	10kΩ (V-400X)
R11	5240167400	470Ω (V-500X)
R12	5240173800	220kΩ (V-500X)
R13	5240172200	47kΩ (V-500X)
R15	5240173000	100kΩ
R16, R19	5240170600	10kΩ

[U] : U.S.A. [C] : CANADA [GE] : GENERAL EXPORT
[A] : AUSTRALIA [E] : EUROPE [UK] : U.K.
[J] : JAPAN

REF. NO.	PARTS NO.	DESCRIPTION
R21	5240170600	10kΩ
R22	5240170600	10kΩ
R23	5240175000	680kΩ
R24	5240173000	100kΩ
R25	5240170600	10kΩ
R26	5240173000	100kΩ
R27	5240170600	10kΩ
R28	5240173000	100kΩ
R29	5240165800	100Ω
R30	5240162800	5.6Ω
R31	5240173000	100kΩ
R32	5240170600	10kΩ
R33	5240173000	100kΩ
R34	5240165800	100Ω
R35	5240169800	4.7kΩ
R36	5240172200	47kΩ
R37	5240170600	10kΩ
R38	5240172200	47kΩ
R39	5240170600	10kΩ
R40	5240165800	100Ω
R41～R43	5240172200	47kΩ (V-500X)
R44, R45	5240173000	100kΩ
R49	5240173000	100kΩ
R50, R51	5240170600	10kΩ
R52	5240167400	470Ω
R53	5240168200	1kΩ
R54	⚠ 5760509600	4.7Ω, Fuse ½W
R55	5240167000	330Ω
R56	5180078000	680Ω ½W
R57	5240167400	470Ω
R58	5240170600	10kΩ
R59	5240167400	470Ω
R60, R62	5240170600	10kΩ
R63	5240172200	47kΩ
R64	5240170600	10kΩ
R65, R66	5240173000	100kΩ (V-500X)
R67, R68	5240170600	10kΩ (V-500X)
R69	5240172200	47kΩ (V-500X)
R70	5240170600	10kΩ (V-500X)
R71	5240169800	4.7kΩ
	CAPACITORS	
C1, C2	5260162150	Elec. 4.6μF 25V
C3	5260162550	Elec. 10μF 16V
C4	5260065650	Elec. 1μF 50V (B.P) (V-400X)
C5	5260160750	Elec. 1μF 50V
C6	5260161150	Elec. 2.2μF 25V
C7	5260162550	Elec. 10μF 16V
C8	5260161150	Elec. 2.2μF 25V
C9	5260162550	Elec. 10μF 16V
C10, C11	5260162150	Elec. 4.7μF 25V
C12	5172236000	Ceramic 0.01μF
C13	5171872000	Mylar 0.047μF
C14～C16	5260162100	Elec. 4.7μF 25V (V-500X)
C17	5173083000	Elec. 1000μF 35V
C18	5173090000	Elec. 2200μF 35V
C19	5260166052	Elec. 100μF 10V
C20	5173072000	Elec. 470μF 16V
C21	5172236000	Ceramic 0.01μF
C22	5172236000	Ceramic 0.01μF (V-500X)
C23	5260160750	Elec. 1μF 50V
C24	5171872000	Mylar 0.047μF
C25	5260160750	Elec. 1μF 50V
C26	5172236000	Ceramic 0.01μF
C28	5172236000	Ceramic 0.01μF

DOLBY B/C PCB Assy (V-500X)

REF. NO.	PARTS NO.	DESCRIPTION
	5760516700	PCB Assy
	5760516800	PCB
	IC's	
IC301	5760516900	CX20027
IC302	5760510200	TA75558S
IC402	5760517000	CX20028
	TRANSISTORS	
Q301, Q401	5145151000	2SC1815GR
Q302, Q402	5145151000	2SC1815GR
Q303	5145150000	2SA1015GR
Q304	5145151000	2SC1815GR
	DIODE	
D301	5760399200	1S1555
	CARBON RESISTORS	
	All resistors are rated ±5% tolerance and ¼W.	
R301, R401	5240172200	47kΩ
R302, R402	5240170000	5.6kΩ
R303, R403	5240169000	2.2kΩ
R304, R404	5240171000	15kΩ
R305, R405	5240167800	680Ω
R306, R406	5240171000	15kΩ
R307, R407	5240171400	22kΩ
R308, R408	5240169700	4.3kΩ
R310, R410	5240169400	3.3kΩ
R311, R411	5240174600	470kΩ
R312, R412	5240167500	510Ω
R313, R413	5240169600	3.9kΩ
R314, R414	5240173900	240kΩ
R315, R415	5240173700	220kΩ
R316, R416	5240173800	220kΩ
R317, R417	5240168900	2kΩ
R318, R418	5240169900	5.1kΩ
R319, R419	5240172200	47kΩ
R320, R420	5240169600	3.9kΩ
R321, R421	5240167100	360Ω
R322, R422	5240173700	200kΩ
R323, R423	5240173800	220kΩ
R324, R424	5240172800	82kΩ
R325, R425	5240173200	120kΩ
R326, R426	5240173000	100kΩ
R327, R427	5240170600	10kΩ
R328, R428	5240173000	100kΩ
R329, R429	5240169400	3.3kΩ
R330, R430	5240169400	3.3kΩ
R331, R431	5240173800	220kΩ
R332, R432	5240170800	12kΩ
R333, R433	5240173000	100kΩ
R334, R434	5240168200	1kΩ
R335, R435	5240168200	1kΩ
R336, R436	5760517200	91kΩ 2%
R350	5240172200	47kΩ
R351	5240170600	10kΩ
R352～R354	5240172200	47kΩ
R356	5240170600	10kΩ

REF. NO.	PARTS NO.	DESCRIPTION			
	CAPACITORS				
C301, C401	5260162150	Elec.	4.7μF	25V	
C302, C402	5260162150	Elec.	4.7μF	25V	
C303, C403	5263107210	Polysty.	560pF		
C304, C404	5171856000	Mylar	0.01μF	50V	5%
C305, C405	5171866000	Mylar	0.027μF	50V	5%
C306, C406	5263162323	Metalized	0.12μF	50V	5%
C307, C407	5171876000	Mylar	0.068μF	50V	5%
C308, C408	5263162523	Metalized	0.18μF	50V	5%
C309, C409	5263162723	Metalized	0.27μF	50V	5%
C310, C410	5171856000	Mylar	0.01μF	50V	5%
C311, C411	5171860000	Mylar	0.015μF	50V	5%
C312, C412	5263162323	Metalized	0.12μF	50V	5%
C313, C413	5171876000	Mylar	0.068μF	50V	5%
C314, C414	5263162523	Metalized	0.18μF	50V	5%
C315, C415	5260162150	Elec.	4.7μF	25V	
C316, C416	5260160750	Elec.	1μF	50V	
C317, C417	5260160750	Elec.	1μF	50V	
C318, C481	5170364000	Mylar	3300pF		
C320, C420	5260165952	Elec.	100μF	10V	
C321, C421	5172218000	Ceramic	330pF	50V	5%
	MISCELLANEOUS				
L301, L401	5760517100	Coil			
L302, L402	5760398300	Filter, Dolby			
	5760398800	Pin, Connector			

REF. NO.	PARTS NO.	DESCRIPTION		
	CAPACITORS			
C301, C401	5260160750	Elec.	1μF	50V
C302, C402	5172212000	Ceramic	100pF	
C303, C403	5173054800	Elec.	220μF	16V
C304, C404	5170370000	Mylar	5600pF	
C305, C405	5170368000	Mylar	4700pF	
C306, C406	5171866000	Mylar	0.027μF	
C307, C407	5171872000	Mylar	0.047μF	
C308, C408	5260162550	Elec.	10μF	16V
C309, C409	5263162223	Metarized	0.1μF	
C310, C410	5260220850	Elec.	0.33μF	50V
C311, C411	5260162550	Elec.	10μF	16V
C312, C412	5260162550	Elec.	10μF	16V
C313	5260160750	Elec.	1μF	50V
C314, C414	5170364000	Mylar	3300pF	
C315, C415	5260162550	Elec.	10μF	16V
	MISCELLANEOUS			
L301, L401	5760398300	Filter, Dolby		
	5760398800	Pin Connect		
	5760509800	Plug, Connect (6P)		
	5760509900	Plug, Connector (7P)		

DOLBY B PCB Assy (V-400X)

REF. NO.	PARTS NO.	DESCRIPTION
	5760507300	PCB Assy
	5760509700	PCB
	IC's	
IC301,IC401	5220412600	TA7629P
IC302	5220013400	TC4066BP
	TRANSISTORS	
Q301～Q304	5145151000	2SC1815GR
	CARBON RESISTORS	
	All resistors are rated ±5% tolerance and ¼W.	
R301, R401	5240173000	100kΩ
R302, R402	5240172200	47kΩ
R304, R404	5240166400	180Ω
R305, R405	5240169400	3.3kΩ
R306, R406	5240172200	47kΩ
R307, R407	5240173400	150kΩ
R308, R408	5240174000	270kΩ
R309	5240171600	27kΩ
R310, R410	5240170800	12kΩ
R311	5240171400	22kΩ
R313	5240173000	100kΩ
R315	5240172200	47kΩ
R316, R317	5240173000	100kΩ
R319	5240172200	47kΩ
R320	5240174000	270kΩ

DBX PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION	
	5760507400	PCB Assy	
	5760510000	PCB	
	IC's		
U971	5760509400	TA78L005P	
U972	5760510100	AN6291	
U973	5760510200	TA75558S	
U974	5220013400	TC4066BP	
U975	5220020000	TC4049BP	
	TRANSISTORS		
Q501～Q506	5145151000	2SC1815GR	
Q601～Q606	5145151000	2SC1815GR	
Q971, Q972	5145151000	2SC1815GR	
Q973, Q974	5145150000	2SA1015GR	
	DIODE		
D973	5760399200	1S1555	
	CARBON RESISTORS		
	All resistors are rated ±5% tolerance and ¼W.		
R501, R601	5240231000	15kΩ	2%
R502, R602	5240228200	1kΩ	2%
R503, R603	5240172500	62kΩ	
R504, R604	5240172700	75kΩ	
R505, R605	5240169400	3.3kΩ	
R506, R606	5240171400	22kΩ	
R507, R607	5240171400	22kΩ	
R508, R608	5240170800	8.2kΩ	
R509, R609	5240171800	33kΩ	
R510, R610	5240173400	150kΩ	

REF. NO.	PARTS NO.	DESCRIPTION		
R511, R611	5240173900	240kΩ		
R512, R612	5240169800	4.7kΩ		
R513, R613	5240171800	33kΩ		
R514, R614	5240170200	6.8kΩ		
R515, R615	5240169400	3.3kΩ		
R516, R616	5240169400	3.3kΩ		
R517, R617	5240171400	22kΩ		
R518, R618	5240171000	15kΩ		
R519, R619	5240169800	4.7kΩ		
R520, R620	5240168200	1kΩ		
R521, R621	5240170600	10kΩ		
R522, R622	5240166200	150Ω		
R523, R623	5240169800	4.7kΩ		
R524, R624	5240171000	15kΩ		
R526, R626	5240173000	100kΩ		
R527, R627	5240230500	9.1kΩ	2%	
R528, R628	5240233400	150kΩ	2%	
R529, R629	5240171800	33kΩ		
R530, R630	5240165800	100Ω		
R531, R631	5240173000	100kΩ		
R532, R632	5240173000	100kΩ		
R533, R633	5240173000	100kΩ		
R534, R634	5240173000	100kΩ		
R971, R972	5240173000	100kΩ		
R973, R974	5240171400	22kΩ		
R975, R976	5240170600	10kΩ		
R977, R978	5240173000	100kΩ		
R981～R983	5240171400	22kΩ		
R984	5760510600	1kΩ	1%	
CAPACITORS				
C501, C601	5263162623	Metarized	0.22μF	
C502, C602	5263162223	Metarized	0.1μF	
C503, C603	5263162223	Metarized	0.1μF	
C504, C604	5170364000	Mylar	3300pF	
C505, C605	5170364000	Mylar	3300pF	
C506, C606	5263107010	Polypro.	470pF	
C507, C607	5263163213	Metarized	0.68μF	
C508, C608	5171864000	Mylar	0.022μF	
C509, C609	5760510700	Elec.	10μF	16V
C510, C610	5171868000	Mylar	0.033μF	
C511, C611	5263162823	Metarized	0.33μF	
C512, C612	5170368000	Mylar	4700pF	
C513, C613	5260165952	Elec.	100μF	10V
C514, C614	5263106800	Polypro.	390pF	
C515, C615	5171864000	Mylar	0.022μF	
C516, C616	5260162550	Elec.	10μF	16V
C517, C617	5260162550	Elec.	10μF	16V
C518, C618	5173407000	Ceramic	12pF	
C519, C619	5260162550	Elec.	10μF	16V
C520, C620	5260162550	Elec.	10μF	16V
C521, C621	5260162550	Elec.	10μF	16V
C522, C622	5260162550	Elec.	10μF	16V
C972	5260165952	Elec.	100μF	10V
C973, C945	5260162550	Elec.	10μF	16V
MISCELLANEOUS				
SR791	5760510500	Semi-fixed	2kΩ(B)	
	5760510300	Plug, Connector (4P)		
	5760510400	Plug, Connector (8P)		

NR SW. PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION		
	5760507510	PCB Assy (V-500X)		
	5760507500	PCB Assy (V-400X)		
	5760512300	PCB		
DIODES				
D924	5760399200	1S1555 (V-500X)		
D936, D937	5760399200	1S1555		
CARBON RESISTORS				
All resistors are rated ±5% tolerance and ¼W.				
R131, R231	5240172200	47kΩ (V-500X)		
R132, R232	5240171200	18kΩ (V-500X)		
R159, R259	5240171200	18kΩ (V-500X)		
R159, R259	5240170400	8.2kΩ (V-400X)		
R160, R260	5240170400	8.2kΩ (V-500X)		
R160, R260	5240170600	10kΩ (V-400X)		
R161, R261	5240169800	4.7kΩ (V-400X)		
R965～R967	5240167600	560Ω		
R969	5240167600	560Ω (V-500X)		
CAPACITORS				
C117, C217	5171860000	Mylar	0.015μF	
C131, C231	5170352000	Mylar	1000pF	(V-500X)
C132, C232	5170368000	Mylar	4700pF	(V-500X)
MISCELLANEOUS				
	5760512400	Push Switch		
	5760512500	Push Switch		
	5760540300	Push Switch (V-500X)		

METER PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION			
	5760506810	PCB Assy (V-500X)			
	5760506800	PCB Assy (V-400X)			
	5760511500	PCB			
IC's					
IC101, IC201	5760511600	AN6891			
LEDS					
LED101～107	5760461900	LN350, RED			
LED201～207	5760461900	LN350, RED			
LED108～112	5760461800	LN250WP, YELLOW			
LED208～212	5760461800	LN250WP, YELLOW			
LED901	5760461900	LN250, RED (V-500X)			
LED902～906	5760461900	LN250, RED			
CARBON RESISTORS					
R181, R281	5181500000	5.6kΩ	5%	¼W	
R182, R282	5181528000	82kΩ	5%	¼W	
R960	5181474000	470Ω	5%	¼W	
CAPACITORS					
C120, C220	5760462000	Elec.	4.7μF	25V	
C917	5760511700	Elec.	10μF	16V	
MISCELLANEOUS					
SW15～SW19	5760512100	Switch, Tact (V-500X)			

MIC PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760506600	PCB Assy
	5760511200	PCB
	TRANSISTORS	
Q107, Q207	5042366000	2SC732BL
	CARBON RESISTORS	
	All resistors are rated ±5% tolerance ¼W.	
R122, R222	5240173800	220kΩ
R123, R223	5240167000	330Ω
R124, R224	5240176000	1.8MΩ
R126, R226	5240170800	12kΩ
R127, R227	5240164200	22Ω
R128, R228	5240173200	120kΩ
R919	5240168200	1kΩ
	CAPACITORS	
C109, C209	5260162550	Elec. 10μF 16V
C110, C210	5172212000	Ceramic 100pF
C111, C211	5260162550	Elec. 10μF 16V
C916	5260166052	Elec. 100μF 16V

VR PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760506700	PCB Assy
	5760511300	PCB
VR1	5760511400	Volume, Slide 20kΩ(A)
VR2	5760464600	Volume, Slide 50kΩ(A)

OPERATION SW PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760507100	PCB Assy
	5760512000	PCB
D10, D11	5760399200	Diode 1S1555
D12	5225006400	LED SLP235B
R14	5240165800	100Ω
SW6~SW12	5760512100	Switch, Tact

TIMER PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760506900	PCB Assy
	5760511800	PCB
SW1	5760511900	Switch, Slide

LED PCB Assy

REF. NO.	PARTS NO.	DESCRIPTION
	5760507200	PCB Assy
	5760512200	PCB
D26~D28	5225012200	LED JLP173, RED
R46~R48	5240027020	Resistor 330Ω 5% ¼W

REGULATOR PCB Assy (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5760506300	PCB Assy
	5760510800	PCB
IC901	⚠5760399000	IC AN7812R

HEADPHONE PCB Assy (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5760506400	PCB Assy
	5760510900	PCB
	5760464800	Phone Jack

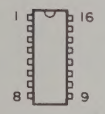
TR PCB Assy (PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	5760506500	PCB Assy
	5760511000	PCB
Q921	⚠5760511100	Transistor 2SD1266Q

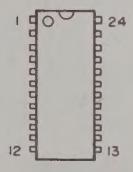
SEMICONDUCTOR ELECTRODES

LA2000
TA75557S
NJM4560S

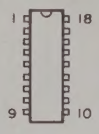
TC4049BP
TD62504P
TC9144P
TA7629P
(TOP VIEW)



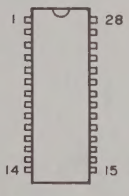
NE654
(TOP VIEW)



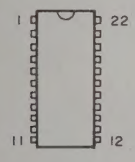
NE652
(TOP VIEW)



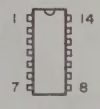
20028
20027
(TOP VIEW)



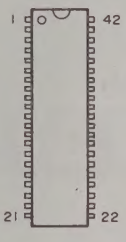
AN6291
(TOP VIEW)



TC4066UBP
TC4081BP
TC4071BP
TC4011BP
TC4069UBP
(TOP VIEW)

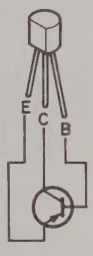


HD38755A58

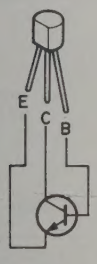


AN7812R

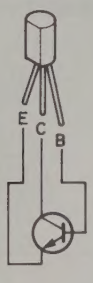
2SA1015GR



2SC732
2SC1815
2SC2240

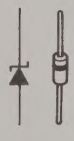


2SC2655



2SD1266
2SD880

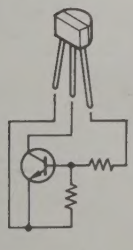
RD10EB3
05Z18X
05Z22Z
05Z3.3Y



S5277B

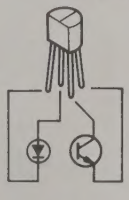
ISS53
ISI555

2SC3402

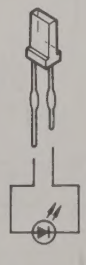


LN250WP
LN350WP

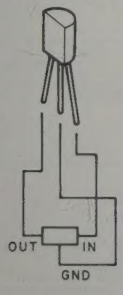
NJL5141EB



SLP173B



TA78L005AP



MP MASTER
MA32778

V-500X/V-400X

TEAC®

ティアック株式会社

	本社 営業部	180・東京都武蔵野市中町3－7－3	電話 武蔵野 (0422) 53-1111代
製品についてのお問合わせ サービスに関するお問合わせ	札幌営業所	064・札幌市中央区南7条西2－2くぼたビル	電話 札幌 (011)521-4101代
	仙台営業所	980・仙台市1番町2－5－5中央ビル	電話 仙台 (0222) 27-1501代
	大宮営業所	330・大宮市桜木町4－2ローズベイ大宮ビル	電話 大宮 (0486) 42-4551代
	東京営業所	100・東京都千代田区永田町2－10－7星ガ岡会館	電話 東京 (03)592-1831代
	千代田営業所	100・東京都千代田区永田町2－10－7星ガ岡会館	電話 東京 (03)592-1836代
	千葉出張所	280・千葉市松波1－11－3石橋松波ビル	電話 千葉 (0472) 55-1281代
	立川営業所	190・東京都立川市栄町4－13－2	電話 立川 (0425) 25-4721代
	横浜営業所	221・横浜市神奈川区沢渡1－1－1高島台第一ビル	電話 横浜 (045)312-3270代
	名古屋営業所	464・名古屋市千種区東山通り3－2－3	電話 名古屋 (052)782-4581代
	静岡出張所	420・静岡市中島大割2861－1	電話 静岡 (0542) 81-6561代
	大阪営業所	564・大阪府吹田市垂水町3－34－10	電話 大阪 (06)384-5201代
	京都出張所	600・京都市下京区大宮通四条下ル四条大宮町21番地三虎ビル	電話 京都 (075)842-0751代
	神戸出張所	650・神戸市中央区山本通り3－1－3谷口マンション内	電話 神戸 (078)242-2458代
	岡山出張所	700・岡山市十日市中町1番40号	電話 岡山 (0862) 25-8601代
	広島営業所	733・広島市中区中島町10－24	電話 広島 (082)243-3581代
	福岡営業所	812・福岡市博多区博多駅東2－17－5モリメンビル	電話 福岡 (092)431-5781代
サービスに関するお問合わせ	本社サービス1課	180・東京都武蔵野市中町3－7－3	電話 武蔵野 (0422) 53-3242代
	沖縄サービスセンター	901-22・沖縄県宜野湾市字喜友名229	電話 沖縄 (09889) 2-2020代
技術的なお問合わせ	・テープデッキ相談室	180・東京都武蔵野市中町3－7－3	電話 武蔵野 (0422) 53-9213代

TEAC CORPORATION

3-7-3 NAKA-CHO MUSASHINO TOKYO PHONE (0422) 53-1111

TEAC CORPORATION OF AMERICA	7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303
TEAC AUSTRALIA PTY., LTD.	115 WHITEMAN STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000

PRINTED IN JAPAN 1083 AO 1.91 D-4444A